

# Changing Schools, Part 1: Student Mobility During the Summer Months in Texas and the Houston Area

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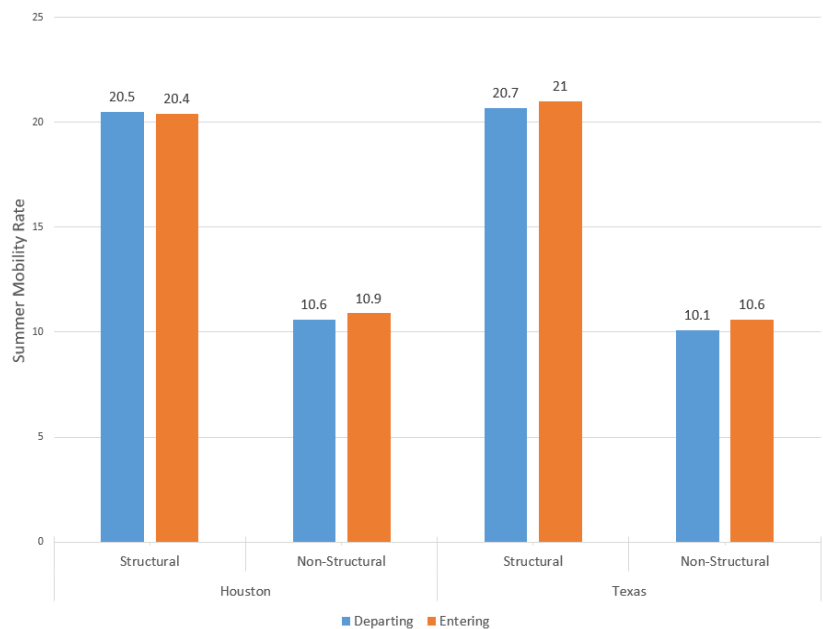
**Changing schools impacts students' achievement, educational attainment, and their relationships with peers and teachers.** Mobile students tend to have lower grades and test scores, experience grade retention more frequently, and are more likely to drop out of school (Rumberger, 2003; South, Haynie, & Bose, 2007). As the evidence of student mobility's negative consequences grows, understanding the influence of mobility on schooling in Texas and the Houston area becomes increasingly important. Before examining mobility's impact, however, we have to understand its prevalence. This research brief offers an initial, descriptive look at summer mobility, or mobility that takes place between school years.

## Key Findings

During the summers following the 2010-11 through 2015-16 school years:

- In Texas, about 1.3 million students entered a new school each summer, which was about 32 moves per 100 students in the state.
- The mobility rate remained relatively stable in Texas and the Houston area because increases in the total number of students changing schools coincided with increasing enrollment.
- Most summer mobility was structural: nearly two-thirds of students who entered a new school or departed an old school did so because of a structural move.
- More students entered Texas schools than departed, resulting in overall positive net mobility for the state.
- In the Houston area, structural mobility tended to result in a net loss of students.

**Figure 1: Summer mobility rates in Houston area and Texas**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years.

# Background

## Study Purpose

In a series of research briefs, the Houston Education Research Consortium (HERC) examines and describes the amount of student mobility in Texas with particular focus on Houston area public schools. This first research brief provides an overview of how many students move during the summer months. Subsequent briefs in this series include:

- 1) **Student mobility during the summer months**
- 2) Student mobility during the school year
- 3) Student mobility within districts versus between districts
- 4) Patterns of student mobility by subgroup (e.g., race/ethnicity, economic disadvantage status, and English language learner status)
- 5) Overall churn and net mobility of students in Houston area public schools

## Key Terms

*Mobility rate* – count of student mobility (when a student changes the school they attend) adjusted to be the number of moves per 100 students.

*Structural mobility* – when a student changes the school they attend because they have completed the terminal grade at that school. Examples of structural mobility are the transition from elementary to middle school and from middle to high school.

*Non-structural mobility* – when a student changes the school they attend for a reason other than completing the terminal grade at that school. These moves include a student switching from one elementary school to another, from one middle school to another, or from one high school to another.

*Net mobility* – during the summer, the difference between the number of students entering a school and the number of students departing from a school (positive net mobility means more students entered a school than left it and negative net mobility means more students departed a school than entered it).

*Houston area* – includes a selection of school districts serving students within the Houston city limits and surrounding areas: Aldine Independent School District (ISD), Alief ISD, Cypress-Fairbanks ISD, Houston ISD, Katy ISD, Klein ISD, Pasadena ISD, Sheldon ISD, Spring ISD, and Spring Branch ISD.

## Data

This research brief utilizes Texas Public Education Information Management System (PEIMS) six-week attendance records from the 2010-11 through 2016-17 school years to describe overall, structural, and non-structural mobility, specifically studying mobility entering schools, departing schools, and the resulting net mobility in Texas – with a particular focus on public schools in the Houston area. Mobility counts (i.e., number of moves) and rates (i.e., number of moves per 100 students) were calculated and reported. For more detail on the data and measurements used to calculate summer mobility, please see Appendix B.

Results were presented for student mobility taking place during the summers following the 2010-11 through 2015-16 school years for Texas and the Houston area.

# Key Findings

1

Summer mobility rates in Texas were relatively stable year after year.

## Summer Mobility

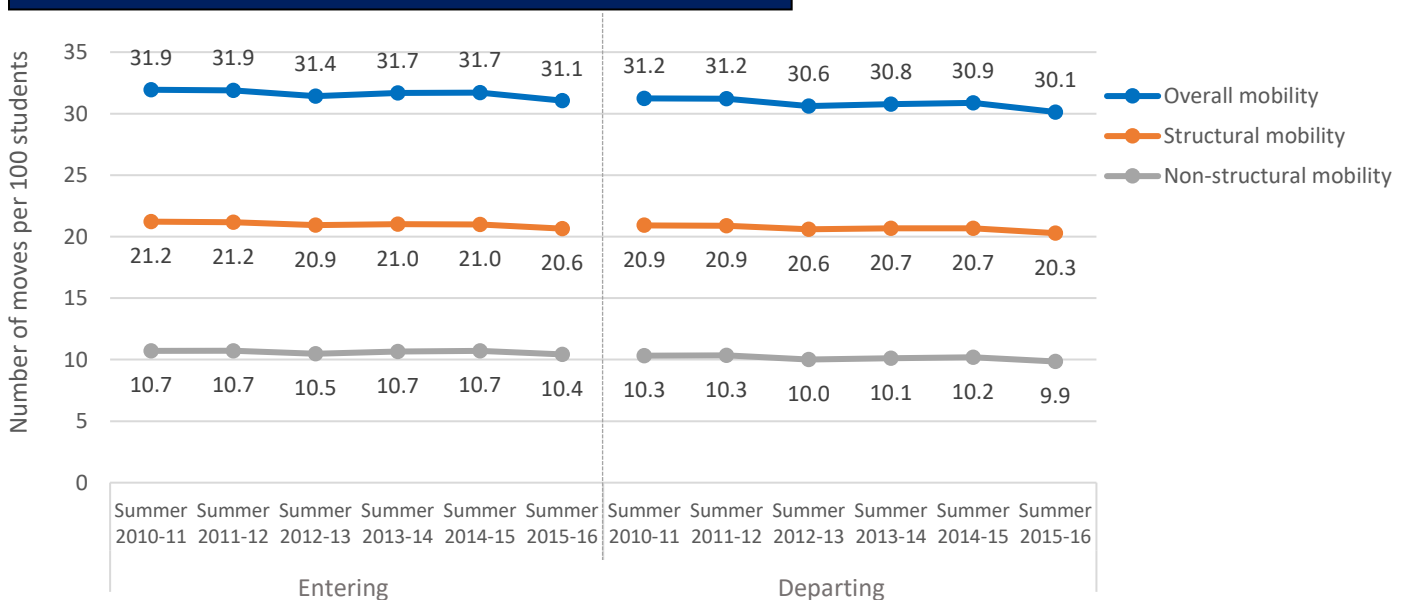
On average during the summer, about 1.32 million students entered Texas public schools and about 1.29 million students departed. Although the amount of student mobility increased summer after summer, so too was the overall number of students enrolled in the state's public schools. As a result, **summer mobility rates in Texas were relatively stable year after year**. On average, for every 100 students in Texas, 32 students entered and 31 students departed schools over the summer.

## Structural vs. Non-Structural

Like overall summer mobility, the number of structural and non-structural moves increased over the time of the study, but the simultaneous increase in the state's total student enrollment also meant **structural and non-structural mobility rates were stable summer after summer**.

The majority of school changes taking place during the summer months in Texas public schools were **structural moves**, such as students going from elementary to middle or middle to high schools. On average, about 66% of *entering* school changes and about 67% of *departing* school changes were structural moves.

Figure 2: Texas summer mobility rates relatively stable over time



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

2

More students entered Texas schools than departed, resulting in overall positive net mobility for the state.

# Key Findings

3

## Public schools gained more students through non-structural mobility than structural mobility.

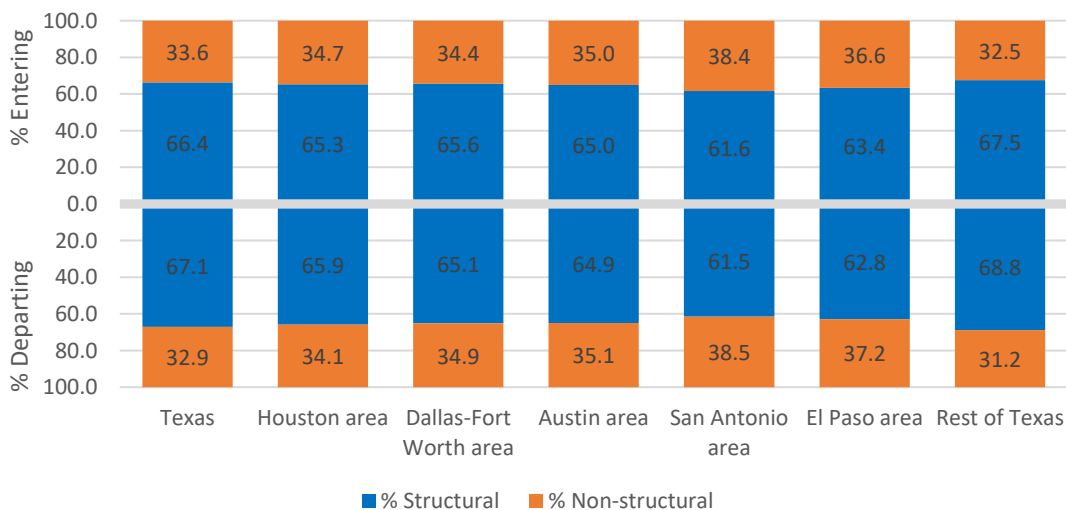
Each summer, more students entered schools in Texas than departed, resulting in overall positive net mobility for the state. On average, the Texas public school system gained about 34,000 students as a result of summer mobility.

In Texas, the net mobility for both structural and non-structural moves was positive, but public schools gained more students through non-structural mobility. Of students making structural moves, about 13,500 more students entered Texas public schools than departed. Of students making non-structural summer moves, about 20,400 more students entered Texas public schools than departed.

Houston area schools experienced lower structural mobility rates than Texas, but higher structural mobility rates than other urban areas across the state. This was true for both entering and departing mobility. On average, for every 100 students in the Houston area, campuses had about 20 students entering each summer and about 21 students departing because of structural mobility.

In contrast, the non-structural mobility rate in the Houston area, while slightly higher than Texas, was average relative to other urban areas in the state. On average, for every 100 students in the Houston area, campuses had about 11 students entering each summer and about 11 students departing a result of non-structural mobility.

**Figure 3: Houston-area mobility primarily structural and higher than other Texas urban areas**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Key Findings

## 4

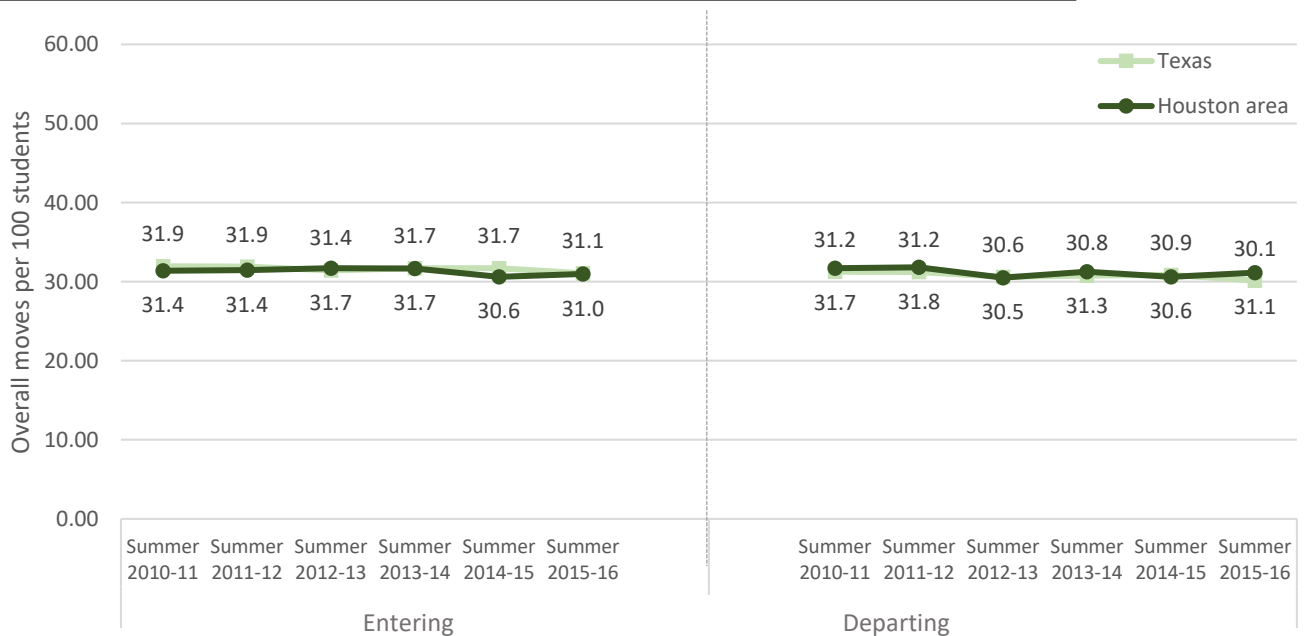
### The overall mobility rate in the Houston area remained relatively stable.

On average, about 172,000 students entered Houston area public schools during the summer, and about 171,000 students departed from campuses in the area. Although the amount of mobility in the Houston area increased summer after summer, enrollment at Houston area schools also increased. As a result, **the overall mobility rate in the Houston area remained relatively stable**. On average, for every 100 students in the Houston area, 32 students entered schools and 31 students departed schools over the summer.

**The overall summer mobility rate for the Houston area was similar to the overall mobility rate of Texas**, and this was the case for both mobility entering and departing schools. Additionally, the Houston area had slightly higher overall mobility rates than other urban areas in the state, with the exception of the Dallas-Fort Worth area.

**The majority of summer mobility entering and departing schools in the Houston area was structural.** About 65% of summer moves entering schools and about 66% of summer moves departing from schools in the Houston area were the result of structural mobility. Both of these values were slightly lower than the state, indicating that a smaller proportion of summer moves in the Houston area were due to students completing the terminal grades at their schools, and instead resulted from moves between the same type of school (e.g., elementary school-to-elementary school).

**Figure 4: Houston-area summer mobility remained stable and similar to overall state rate**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Key Findings

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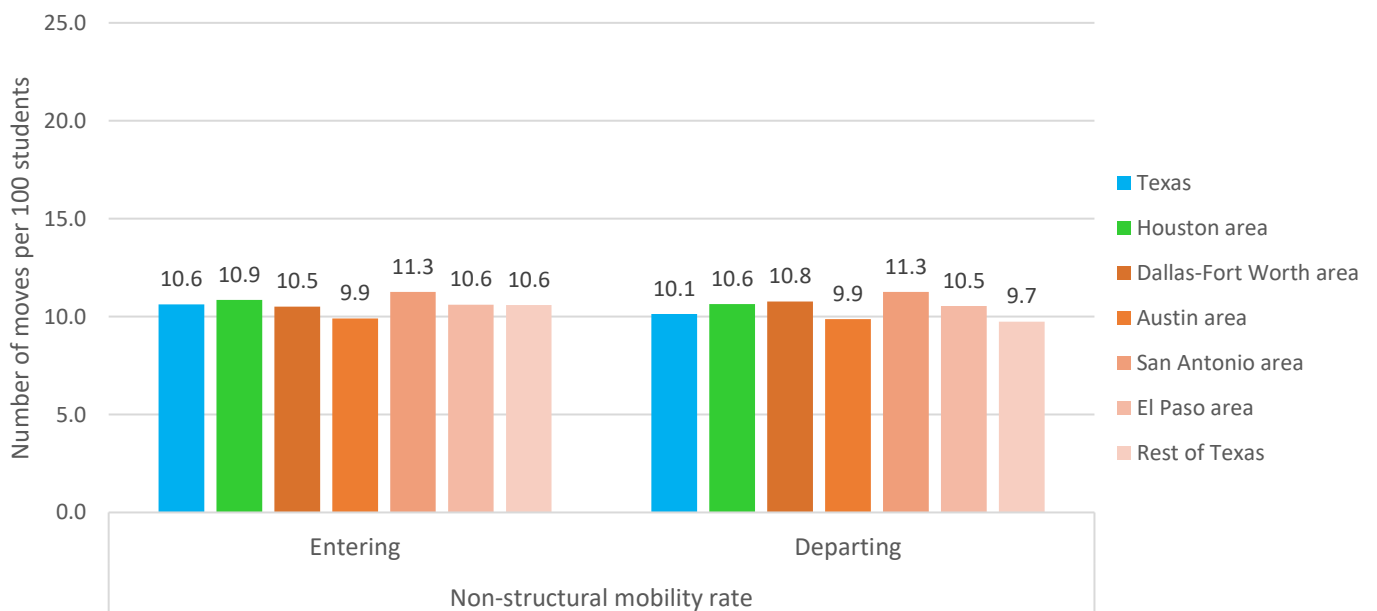
**On average, Houston area campuses experienced positive net mobility, but this varied from year to year.**

**On average, Houston area campuses experienced positive net mobility, but this varied from year-to-year.**

On average, about 600 more students entered public schools in the Houston area than departed because of summer mobility, but this number differed from one year to the next. During summer 2012-13, the Houston area had positive net mobility of around 6,400 students, whereas during summer 2015-16 there was negative net mobility of almost 1,100 students. Other urban areas in the state experienced similar fluctuations in their net mobility, except for the Dallas-Fort Worth area that consistently experienced negative net mobility.

Despite the overall positive net mobility in the Houston area, structural mobility and non-structural mobility exhibited different trends. **On average, the net mobility for structural moves was negative and the net mobility for non-structural moves was positive**, but these averages hid year-to-year differences. For example, structural mobility resulted in an average net loss of 560 students, but in summer 2012-13 there was a net gain of about 760 students and in summer 2015-16 there was a net loss of about 1,300 students. Similarly, non-structural mobility resulted in an average net gain of 1,200 students, but in summer 2011-12 there was a net loss of about 1,200 students and in summer 2014-15 there was a net gain of 1,100 students. Note, despite the variability over time, in more recent years structural mobility has consistently resulted in negative net mobility and non-structural mobility has consistently culminated in positive net mobility for Houston-area public schools.

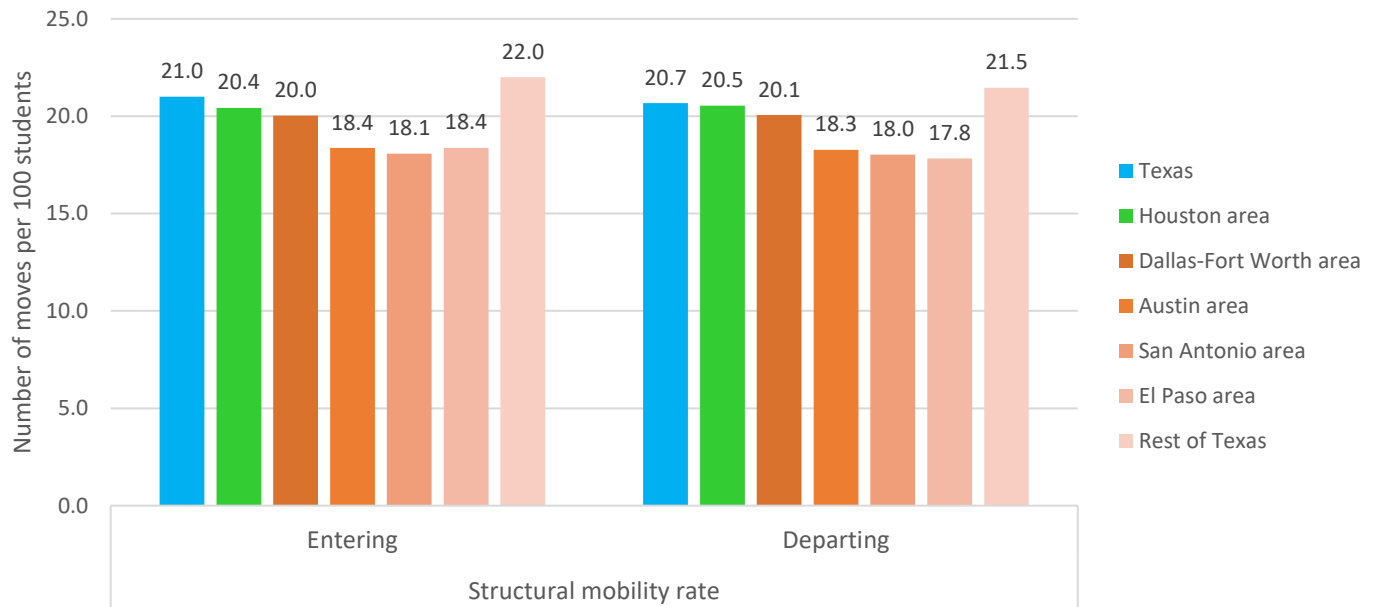
**Figure 5: Summer non-structural mobility rates similar across Texas**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Key Findings

Figure 6: Summer structural mobility rates similar across Texas



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Conclusion

Previous research shows students' educational experiences are impacted when they change schools. Each summer about 1.3 million students depart from public school campuses around the state and 1.3 million students enter campuses around the state. The majority of these school changes were structural — meaning they occurred because the student completed the terminal grade at their prior campus. Even so, more than 30 percent of school changes during the summer were non-structural — over 440,000 students entering campuses and around 423,000 students departing campuses. These numbers have been on the rise, but because of the simultaneous increase in the enrollment numbers in Texas public schools, the mobility rates for the duration of this study were relatively stable.

Each summer there were typically more students entering schools than departing schools, resulting in overall positive net mobility. However, this pattern obscures somewhat different stories of structural and non-structural moves in the Houston area. For Houston-area public schools, the overall net gains resulting from summer mobility were almost entirely the product of non-structural moves. In contrast, structural mobility resulted in net losses for Houston area schools. At these junctures in students' learning, more families were opting to exit public schools in the Houston area than enter them. This pattern differed from Texas schools as a whole, which saw net gains from both structural and non-structural mobility.

## Discussion

Further study of structural mobility is required to better understand the processes taking place as students make these important transitions in their education. An upcoming supplement to this brief will focus specifically on structural mobility. As mobility is considered in future briefs, it will be essential to distinguish between structural and non-structural mobility, as these appear to tell different stories.

As districts assess their own summer mobility rates, there are many reasons why schools and districts may experience increases and decreases in their mobility rates that do not necessarily point to large, uncontrolled movements of students between schools. First, as smaller public school districts consolidate or become absorbed by larger districts, it may appear as if many students are moving; however, this mobility is more about changes in the composition, size, and boundaries of districts than students actually changing schools. Additionally, as the Houston area continues to attract families, districts are forced to build new schools to support population growth. When new schools open, attendance boundaries for old and new schools are often redrawn leading to large numbers of students changing schools. Finally, there are many factors outside the school's immediate control that shape the flow of students, including (but not limited to) changes in the local labor market (e.g., businesses opening or closing), residential development (e.g., building of planned communities or apartment complexes), or introduction of educational competitors (e.g., opening of a charter school). Better understanding of the mechanisms that shape students' mobility will provide schools and districts with more effective interventions aimed at serving mobile students.



# References

Rumberger, R.W. (2003). The Causes and Consequences of Student Mobility. *The Journal of Negro Education*, 72(1), 6. <https://doi.org/10.2307/3211287>

South, S.J., Haynie, D.L., & Bose, S. (2007). Student Mobility and School Dropout. *Social Science Research*, 36(1), 68-94. <https://doi.org/10.1016/j.ssresearch.2005.10.001>

## Appendix A. Independent School District (ISD) Profiles

Each school district profile offers a brief discussion of the number of students entering and departing schools in the district, along with the resulting net mobility. Districts' mobility rates are discussed relative to the Houston area and Texas. No comparisons are made between the public school districts themselves or to other urban areas in Texas. Comparisons, rankings, and ratings of schools and districts can work against cooperation and coordination. The goal of this research brief, as with all HERC research, is to expand and build shared knowledge and understanding on a topic — in this case, student mobility, in the hopes of providing information that can be used to support the decision-making process of policy makers.

# Appendix

## A1. Aldine ISD

### Overall summer mobility

- **The overall summer mobility rates in Aldine ISD were stable over the study period, and they were consistently higher than rates in the Houston area and Texas (Figure A1a).** For every 100 students in Aldine ISD, an average of 43 students entered district schools and 43 students departed district schools over the summer. In contrast, in both the Houston area and Texas, only about 31 per 100 students entered and departed over the summer.

### Structural vs. non-structural mobility

Aldine ISD's high overall mobility is attributable to its structural mobility, or the number of students who change schools because of grade configuration.

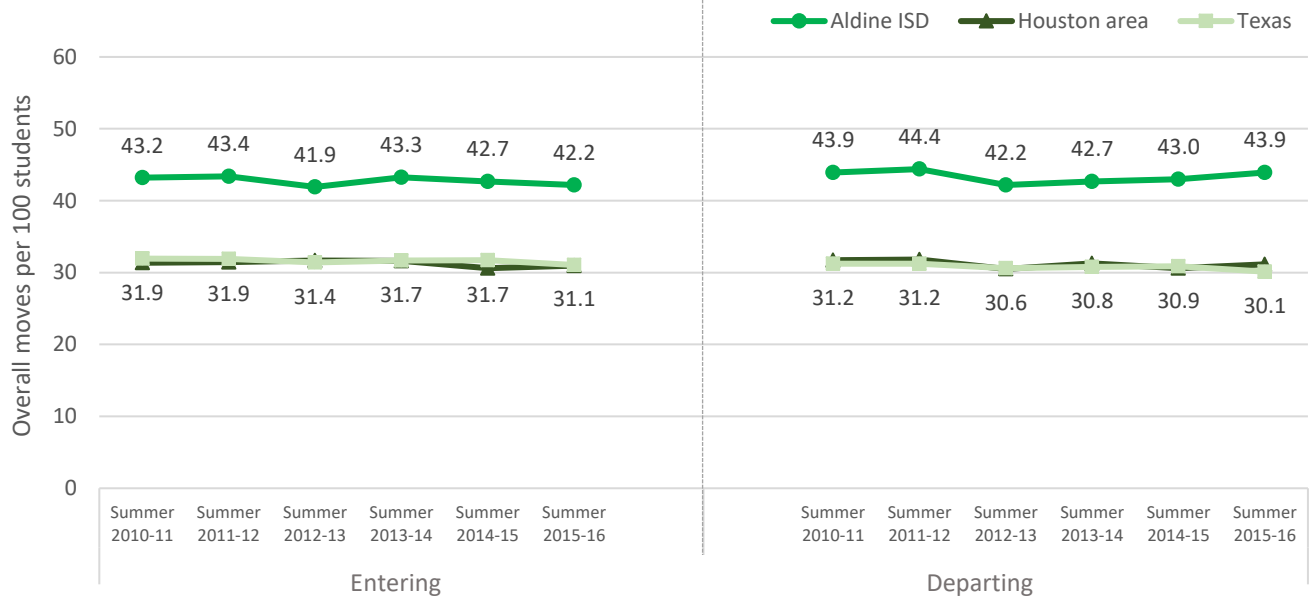
- **Compared to the Houston area and Texas, a larger proportion of overall mobility in Aldine ISD was structural (Figure A1b).** On average, about three-quarters of moves in the district were structural, whereas roughly two-thirds of moves in the Houston area and Texas were structural.
- **While Aldine ISD had higher structural mobility rates than the Houston area and Texas, its non-structural mobility rates were similar (Figure A1c).** For every 100 students, the district had about 11 more students entering its schools and about 13 more departing over the summer than the Houston area and Texas. For non-structural mobility, Aldine ISD, the Houston area, and Texas all saw about 10 students entering and departing per 100.

### Net mobility

- **More students departed schools than entered schools in Aldine ISD over the summer (Figure A1c).** On average, roughly 22,700 students entered district schools and 23,000 students departed district schools over the summer. Thus, overall mobility resulted in an average net loss of 300 students.
- **The net mobility for structural moves in Aldine ISD was negative, but the net mobility for non-structural moves was positive.** Over the summer, structural mobility resulted in an average net loss of 600 students and non-structural mobility resulted in an average net gain of about 300 students. Although these numbers changed year to year, the trends were generally consistent.

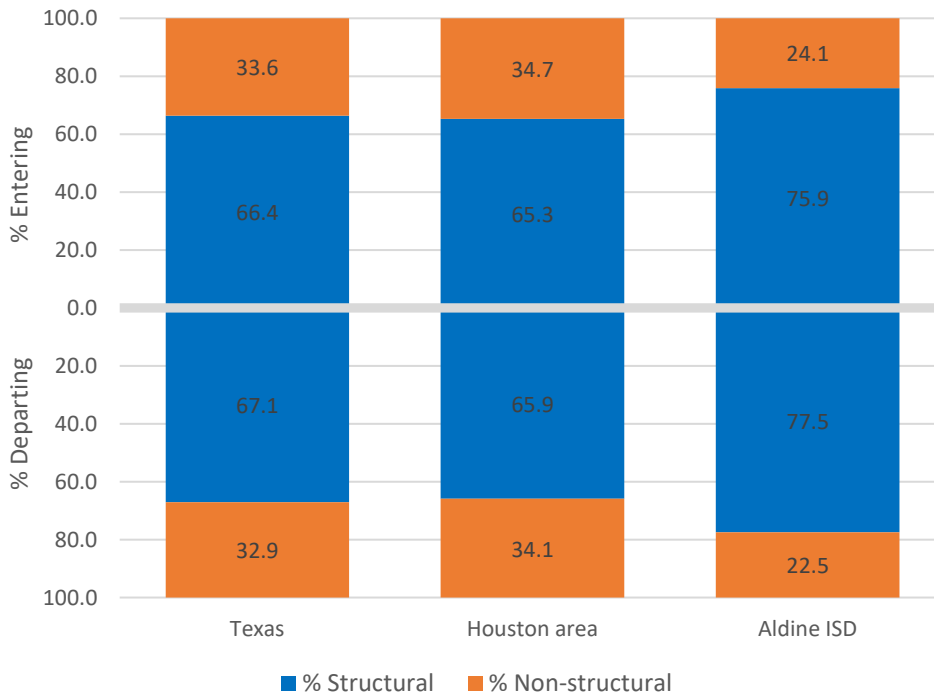
# Appendix

**Figure A1a: Overall summer mobility rates stable over time in Aldine ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

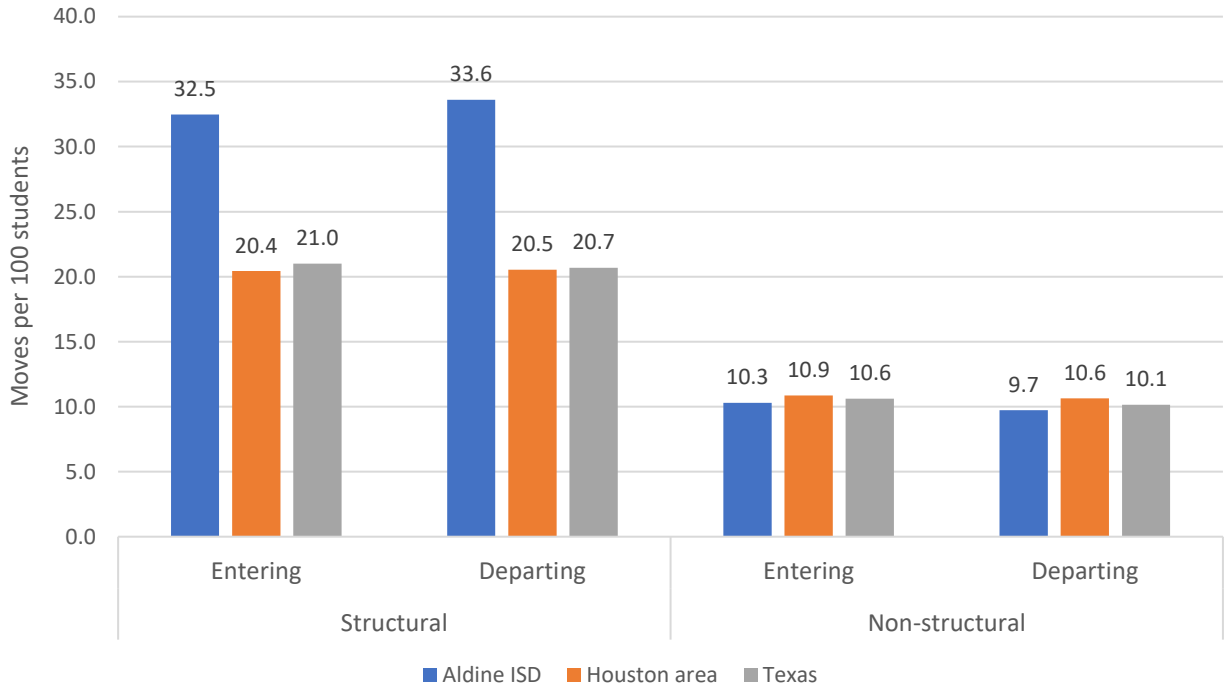
**Figure A1b: Higher rate of structural mobility in Aldine ISD than Houston area**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

**Figure A1c: Average rates of structural and non-structural summer mobility in Aldine ISD**



Note: Aldine changed to a non-traditional grade configuration in the 2017-2018 school year

Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

## A2. Alief ISD

### Overall summer mobility

- **The summer mobility rates in Alief ISD were stable over the study period, and they were consistently higher than the Houston area and Texas (Figure A2a).** For every 100 students in the district, an average of 36 students entered district schools and 37 students departed district schools over the summer. In contrast, in both the Houston area and Texas, only about 31 per 100 students entered and departed schools over the summer.

### Structural vs. non-structural mobility

Alief ISD's high overall mobility is attributable to its structural mobility, or the number of students who change schools because of grade configuration.

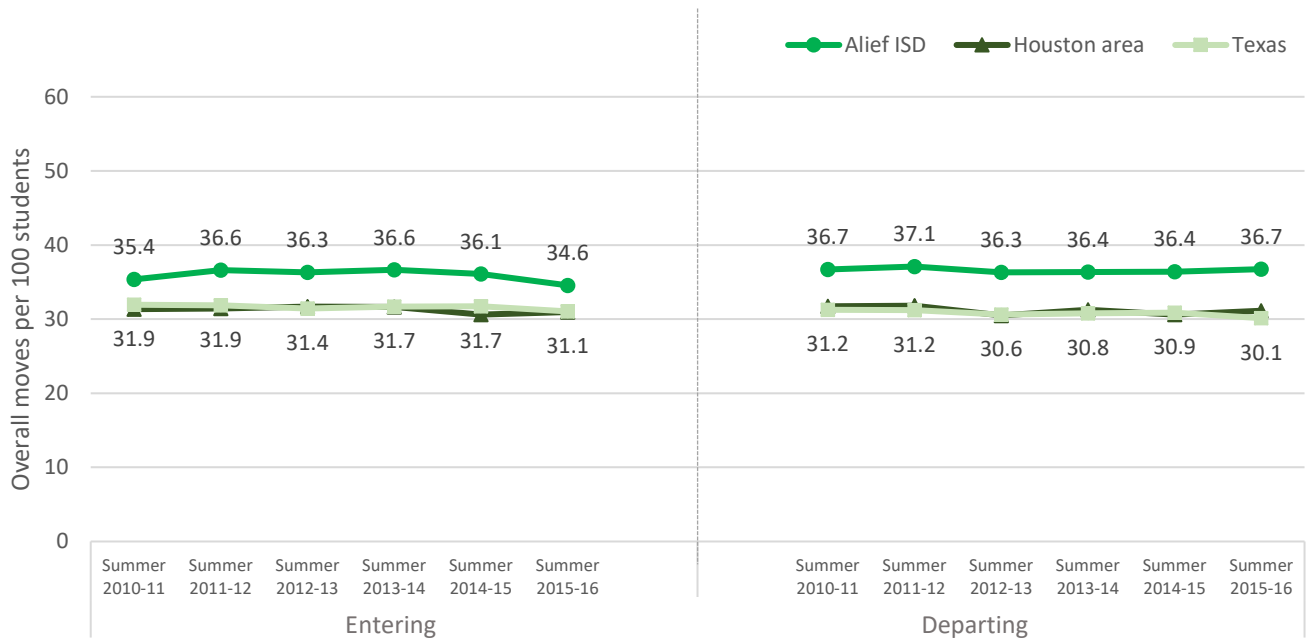
- **Compared to the Houston area and state of Texas, a larger proportion of overall mobility in Alief ISD was structural (Figure A2b).** On average, around 70% of moves in the district were structural, whereas less than two-thirds of moves in the Houston area were structural.
- **While Alief ISD had higher structural mobility rates than the Houston area and Texas, its non-structural mobility rates were similar (Figure A2c).** For every 100 students, the district had about 11 more students entering its schools in a structural move and about 13 more students departing its schools in a structural move over the summer than the Houston area and Texas. However, the district, the Houston area, and Texas all experienced non-structural mobility rates of about 10 moves per 100 students, both for entering and departing moves.

### Net mobility

- **Over most summers, more students departed schools than entered schools in Alief ISD (Figure A1c).** On average, roughly 13,500 students entered district schools and 13,800 students departed district schools over the summer. Thus, overall mobility resulted in an average net loss of 260 students. However, this varied year to year: in the summer following the 2013-14 school year, mobility resulted in a net gain of 110 students; in the summer following the 2015-16 school year, mobility resulted in a net loss of about 850 students.
- **The average net mobility for both structural and non-structural moves in Alief ISD was negative, but this differed slightly year to year.** Non-structural moves always resulted in a net loss of students, and, on average, this was equal to a net loss of 220 students. Structural moves sometimes resulted in a net gain and sometimes a net loss, but on average led to a net loss of about 40 students.

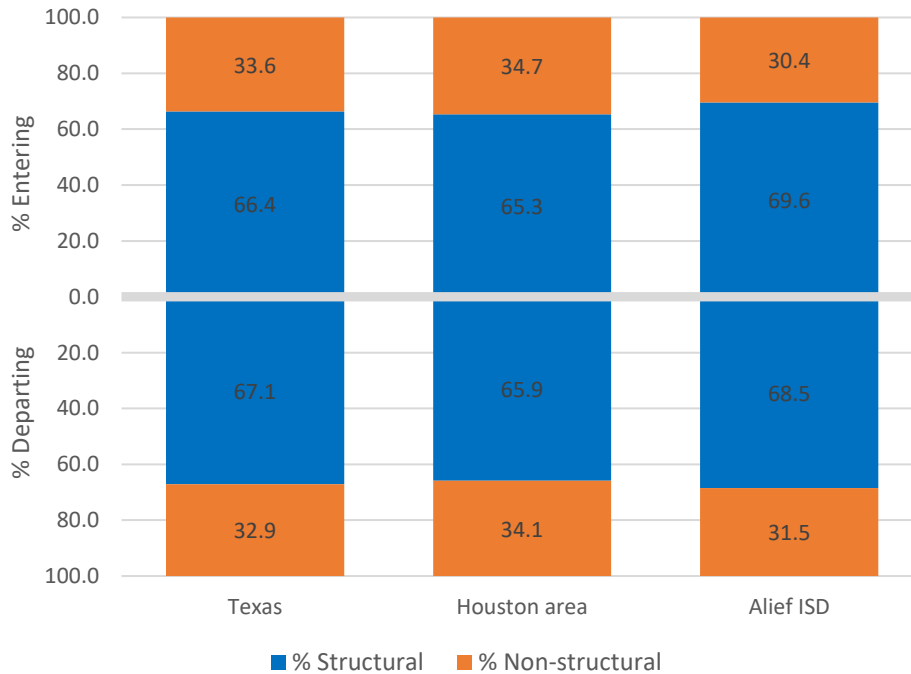
# Appendix

**Figure A2a: Overall summer mobility rates stable over time in Alief ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

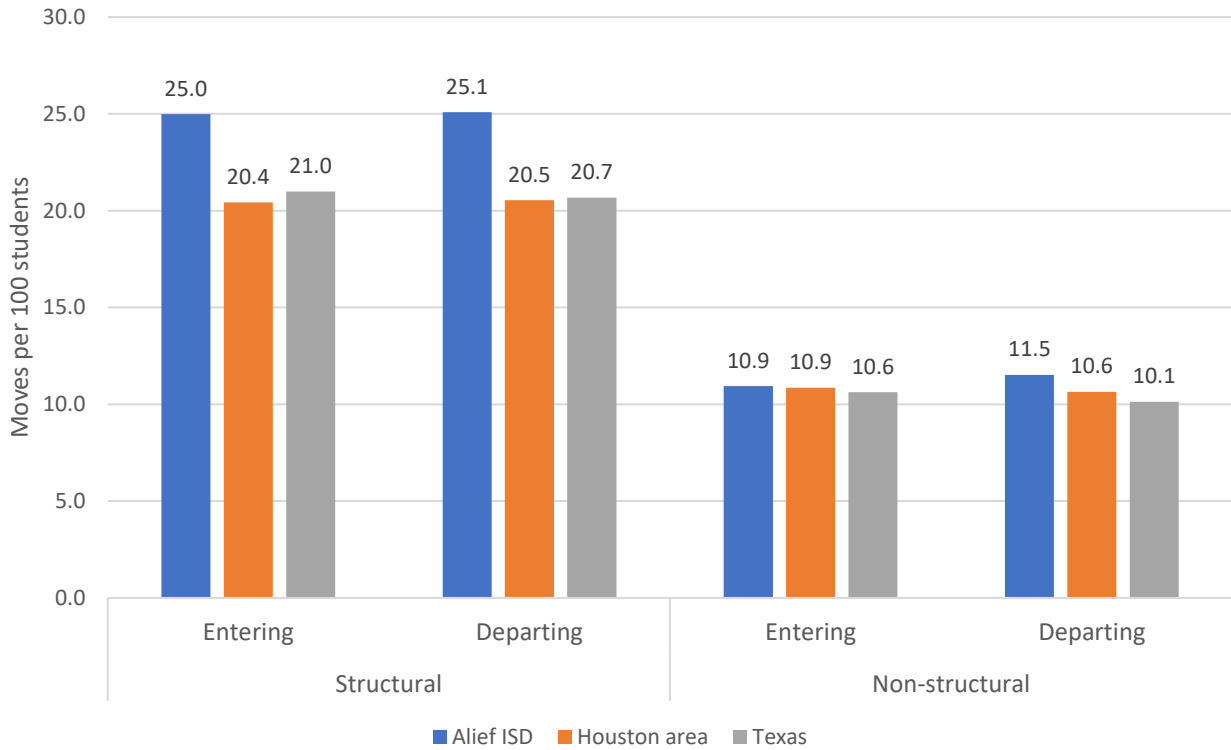
**Figure A2b: Structural mobility rates slightly higher in Alief ISD than Texas and Houston area**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

**Figure A2c: Structural mobility rates higher in Alief ISD**



Note: Alief has a non-traditional grade configuration

Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years



## A3. Cypress-Fairbanks ISD

### Overall summer mobility

- **The overall summer mobility rates in Cypress-Fairbanks ISD were stable over the study period, and they were consistently lower than rates in the Houston area and Texas (Figure A3a).** For every 100 students in Cypress-Fairbanks ISD, an average of 28 students entered district schools and 27 students departed district schools over the summer. In contrast, in both the Houston area and Texas, only about 31 per 100 students entered and departed schools over the summer.

### Structural vs. non-structural mobility

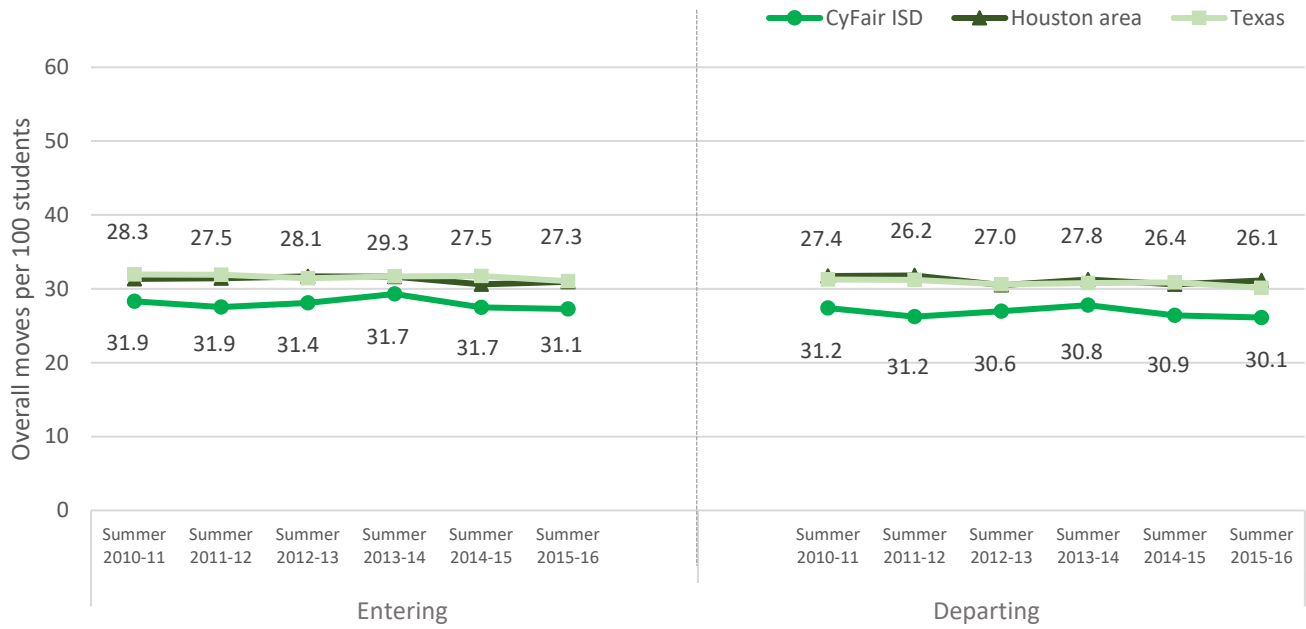
- **Compared to the Houston area and state of Texas, a similar proportion of overall mobility in Cypress-Fairbanks ISD was structural (Figure A3b).** On average, about two-thirds of moves in the district, the Houston area, and Texas were structural moves.
- **Cypress-Fairbanks ISD had lower structural and non-structural mobility rates than the Houston area and Texas (Figure A3c).** For every 100 students, the district had about three fewer students entering its schools in a structural move and about four fewer students departing its schools in a structural move over the summer than the Houston area and Texas. For non-structural moves, the district had about one fewer student entering and departing for every 100 students compared to the Houston area and Texas.

### Net mobility

- **On average, more students entered schools than departed schools in Cypress-Fairbanks ISD over the summer (Figure A1c).** On average, roughly 25,500 students entered district schools over the summer and 24,400 students departed district. Thus, overall mobility resulted in a net gain of 1,070 students.
- **The net mobility for both structural and non-structural moves in Cypress-Fairbanks ISD was positive.** Over the summer, the district gained an average of 570 students from structural moves (i.e. grade configuration) and gained an average of 500 students from non-structural moves.

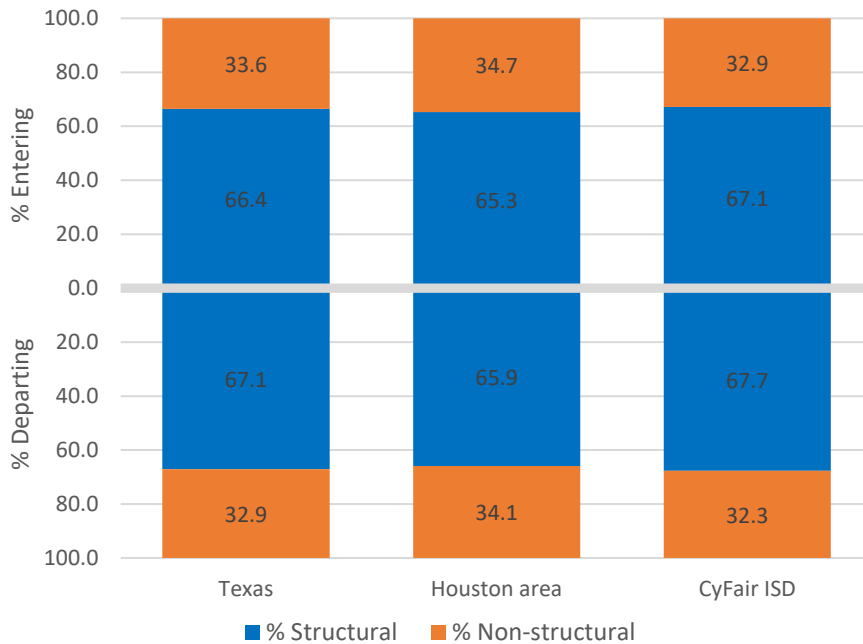
# Appendix

**Figure A3a: Overall summer mobility rates relatively stable over time in Cypress-Fairbanks ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

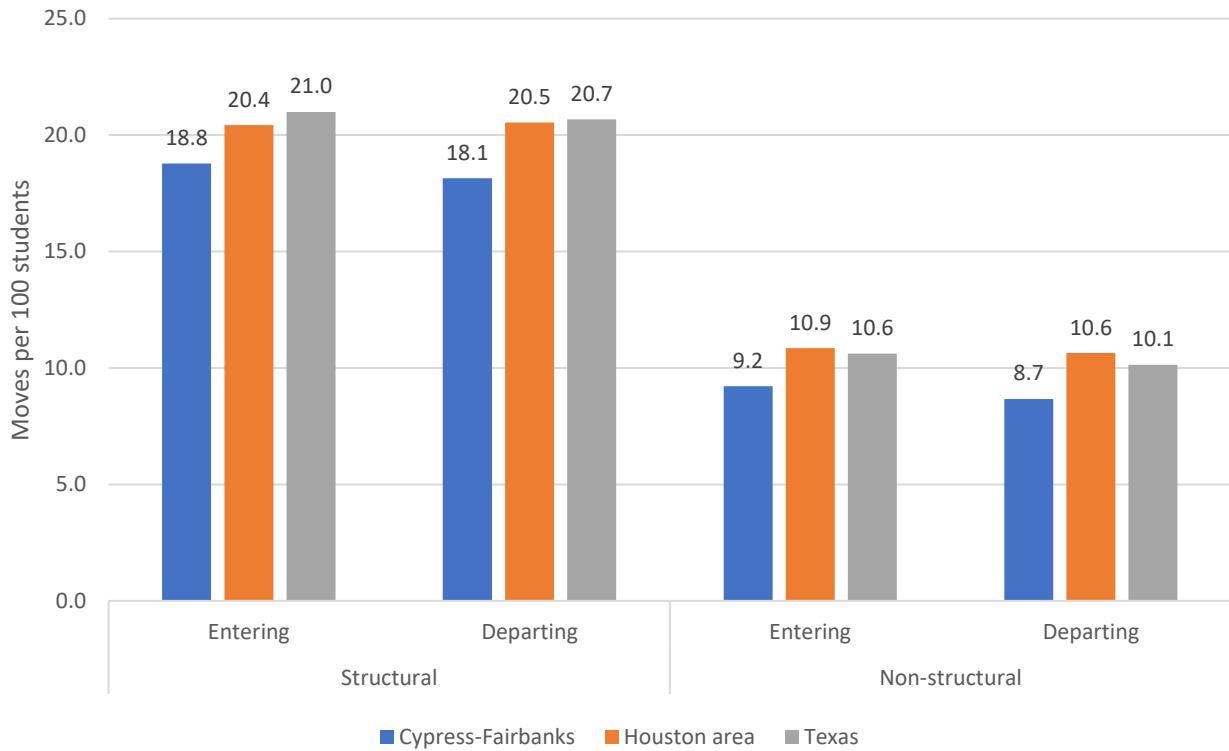
**Figure A3b: Higher rate of structural mobility in Cypress-Fairbanks ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

Figure A3c: Lower structural and non-structural mobility rates in Cypress-Fairbanks ISD



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A4. Houston ISD

### Overall summer mobility

- **The overall summer mobility rates in Houston ISD were stable over the study period, and they were similar to rates in the Houston area and Texas (Figure A4a).** For every 100 students in the district, an average of 29 students entered district schools and 30 students departed over the summer. This was similar to both the Houston area and Texas, where about 31 per 100 students entered and departed schools over the summer.

### Structural vs. non-structural mobility

Although Houston ISD had similar overall mobility rates to the region and state, its structural and non-structural mobility rates followed different patterns.

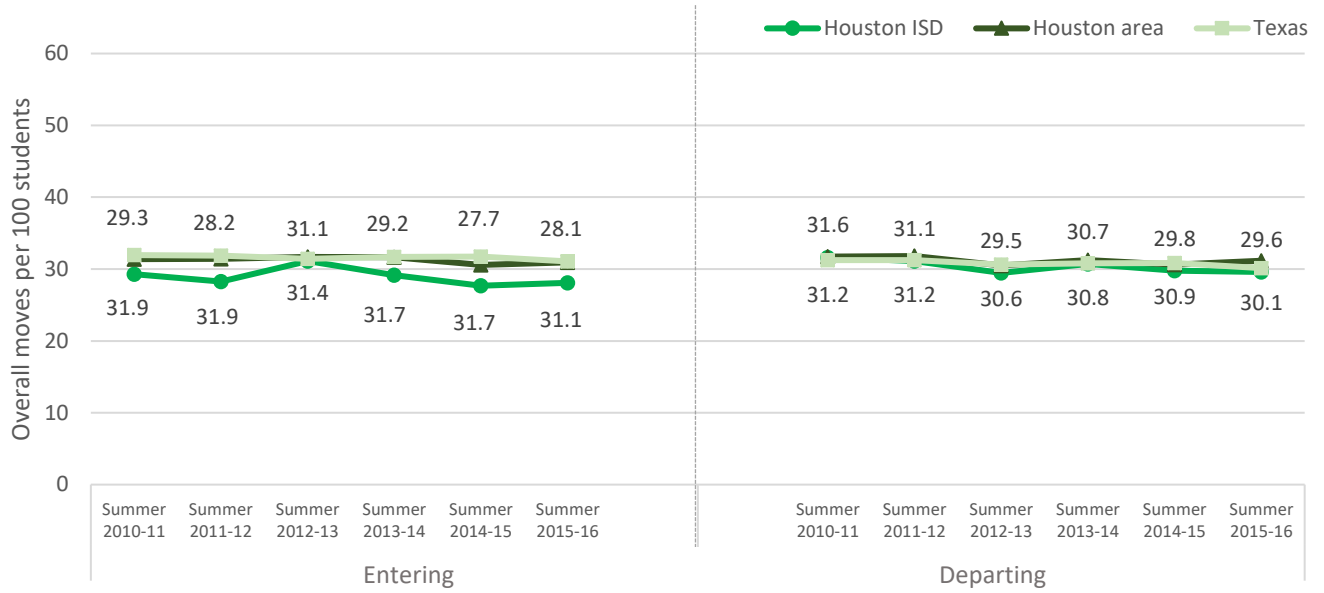
- **Compared to the Houston area and Texas, a smaller proportion of overall mobility in Houston ISD was structural (Figure A4b).** On average, about 56% of moves in Houston ISD were structural, whereas over 65% of moves in the Houston area were structural.
- **Houston ISD had lower structural mobility rates than the Houston area and state of Texas, but its non-structural mobility rates were higher (Figure A4c).** For every 100 students, the district had about five fewer students entering its schools in a structural move and about four fewer students departing its schools in a structural move over the summer than the Houston area and Texas. For non-structural moves, the district had about two more students entering and departing for every 100 students compared to the Houston area and Texas.

### Net mobility

- **On average, more students departed schools than entered schools in Houston ISD over the summer (Figure A4c).** On average, roughly 47,400 students entered district schools over the summer and 49,770 students departed over the summer. Thus, summer mobility resulted in a net loss of 2,370 students, or about one student per every 100 students in the district.
- **The net mobility for both structural and non-structural moves in Houston ISD was negative.** Over the summer, Houston ISD lost an average of 1,640 students from structural moves (i.e. grade configuration) and lost an average of 730 students from non-structural moves.

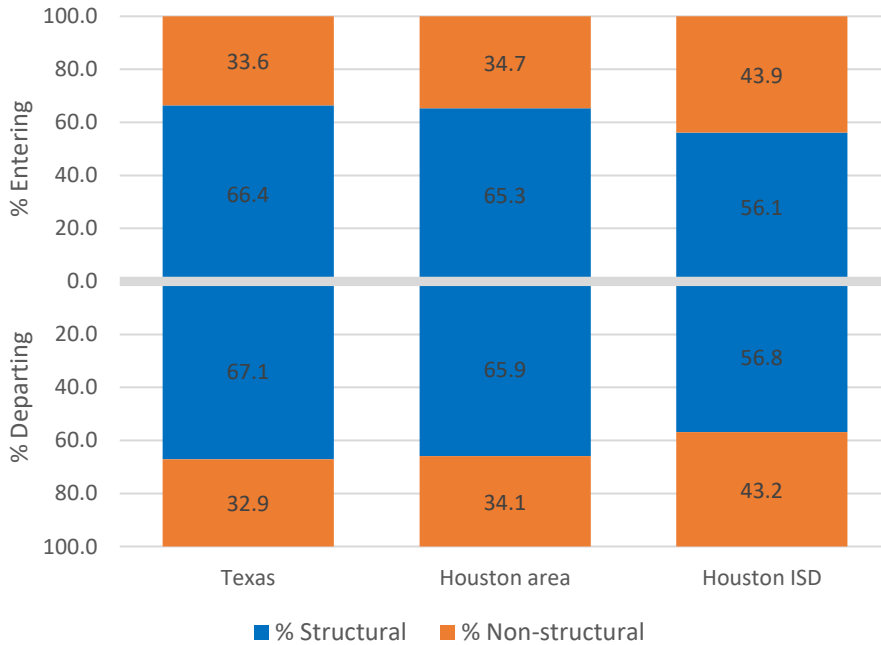
# Appendix

**Figure A4a: Overall summer mobility rates relatively stable over time in Houston ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

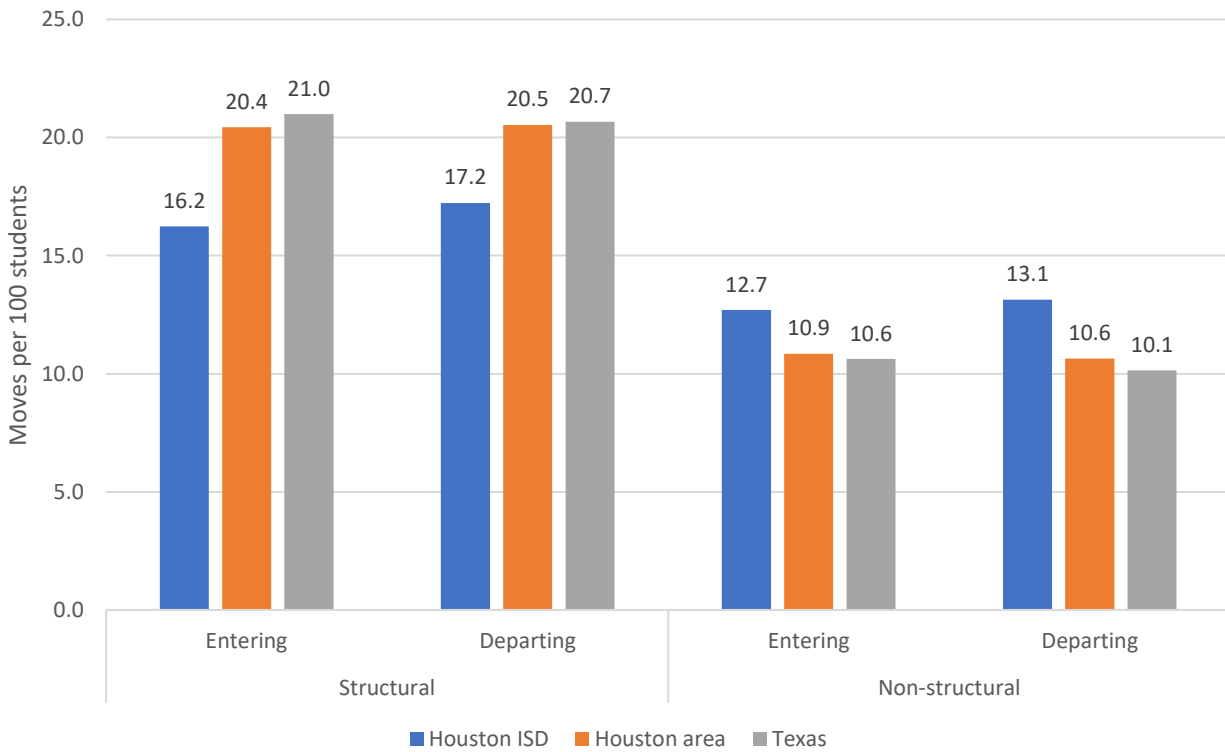
**Figure A4b: Lower proportion of mobility was structural in Houston ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

**Figure A4c: Lower structural, higher non-structural mobility rates in Houston ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A5. Katy ISD

### Overall summer mobility

- **The overall summer mobility rates in Katy ISD fluctuated slightly over the study period, but they were usually lower than rates in the Houston area and Texas (Figure A5a).** For every 100 students in the district, an average of 30 students entered district schools and 28 students departed district schools over the summer. This was slightly lower than both the Houston area and Texas, where about 31 per 100 students entered and departed schools over the summer.

### Structural vs. non-structural mobility

Although Katy had lower overall mobility rates than the region and state, its structural and non-structural mobility rates followed slightly different patterns.

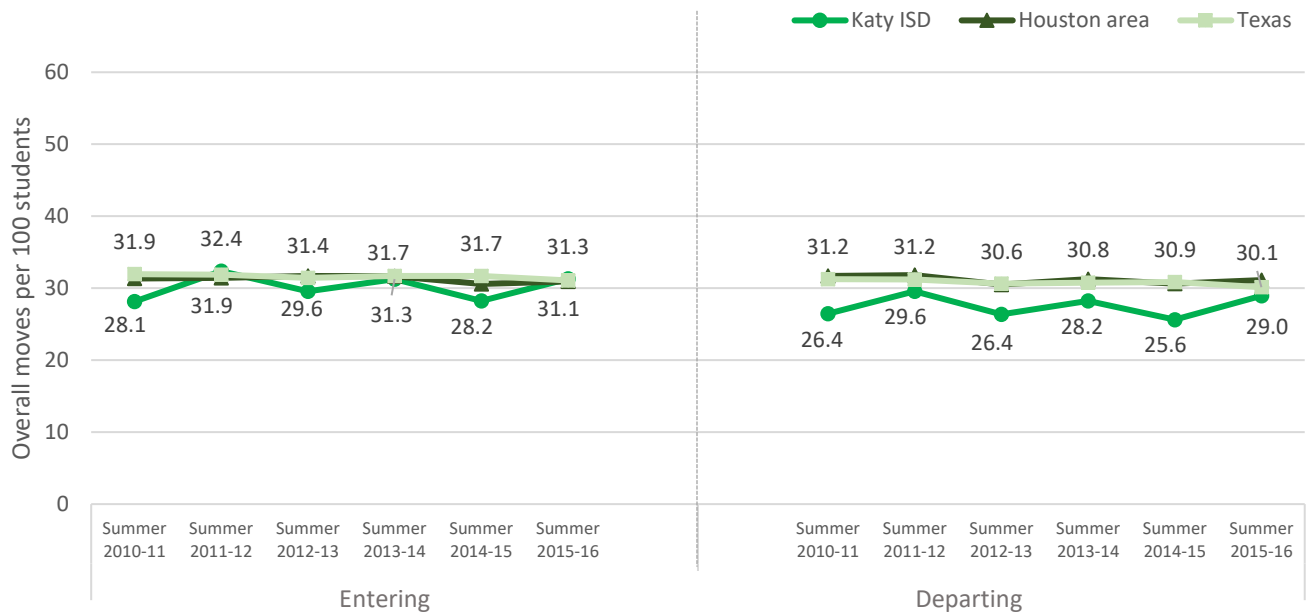
- **Compared to the Houston area and state of Texas, a similar proportion of overall mobility in Katy ISD was structural (Figure A4b).** On average, about 64% of moves entering the district and 67% of moves departing were structural.
- **Katy ISD had lower structural and non-structural mobility rates than the Houston area and Texas, with the exception of non-structural moves entering the district (Figure A5c).** For every 100 students, the district had about two fewer students entering its schools in a structural move and about three fewer students departing its schools in a structural move over the summer than the Houston area and Texas. For non-structural moves, the district had the same number of students entering schools for every 100 students compared to the Houston area and Texas.

### Net mobility

- **More students entered schools than departed schools in Katy ISD over the summer (Figure A5c).** On average, roughly 16,700 students entered district schools over the summer, and 15,200 students departed district schools over the summer. Thus, summer mobility resulted in a net gain of 1,450 students or about three students per every 100 students in the district.
- **The net mobility for both structural and non-structural moves in Katy ISD was positive.** Over the summer, the district gained an average of about 380 students from structural moves (i.e. grade configuration) and about 1,070 from non-structural moves.

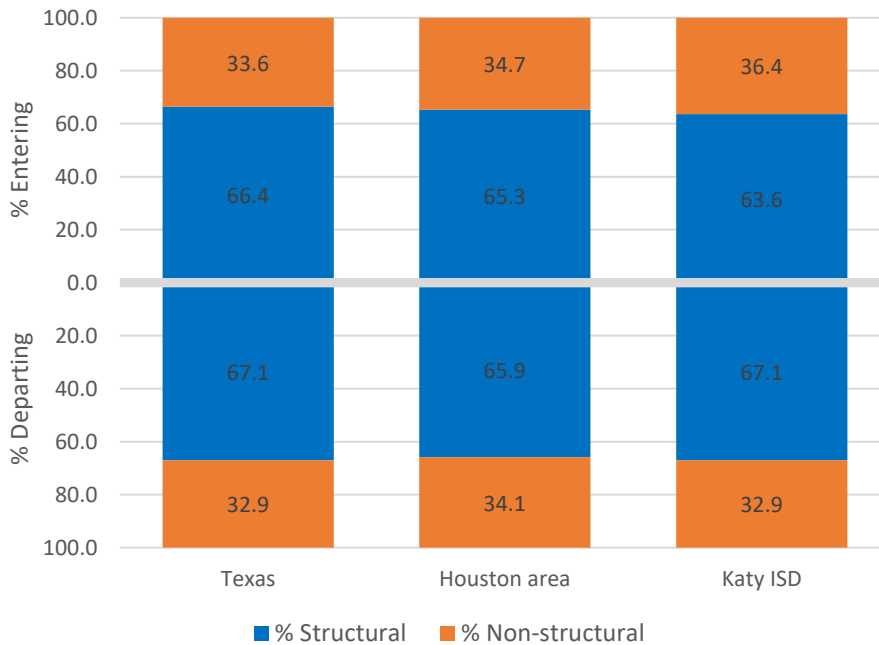
# Appendix

**Figure A5a: Overall summer mobility rates fluctuated slightly in Katy ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

**Figure A5b: Roughly two-thirds of summer mobility was structural in Katy ISD**

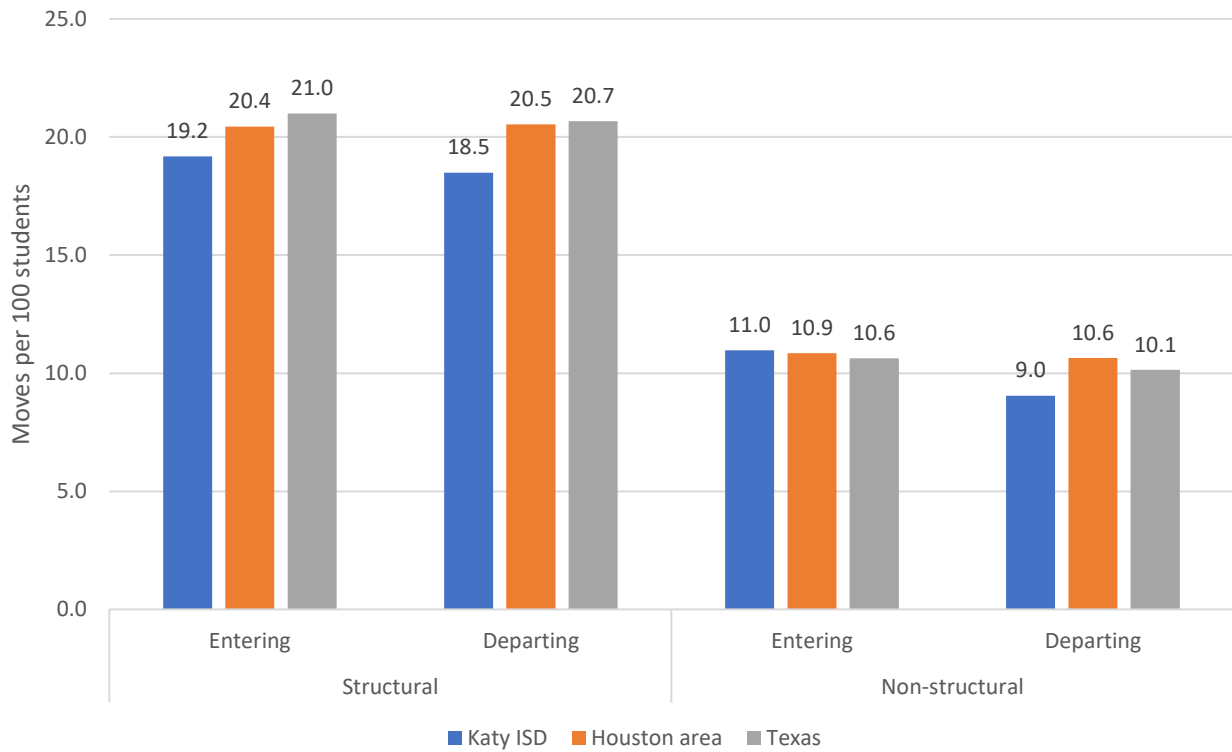


Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years



# Appendix

Figure A5c: Lower structural and non-structural departing mobility rates in Katy ISD



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A6. Klein ISD

### Overall summer mobility

- **The overall summer mobility rates in Klein ISD were stable over the study period, and they were consistently lower than rates in the Houston area and Texas (Figure A6a).** For every 100 students in the district, an average of 29 students entered district schools and 27 students departed district schools over the summer. This was slightly lower than both the Houston area and Texas, where about 31 per 100 students entered and departed schools over the summer.

### Structural vs. non-structural mobility

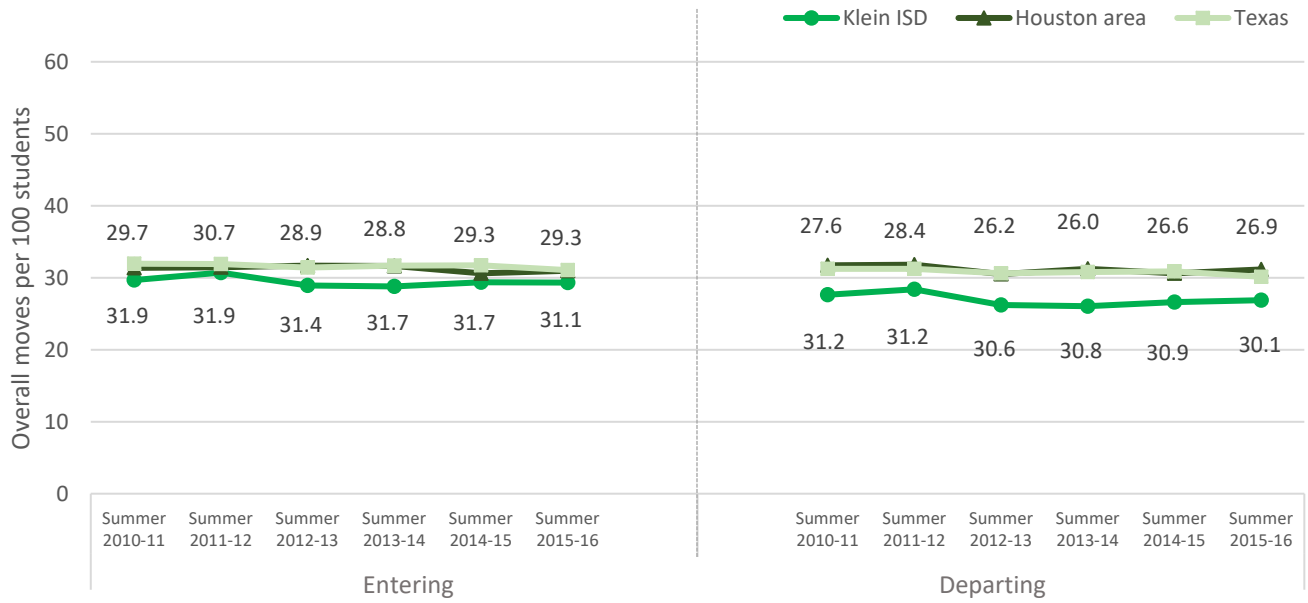
- **Compared to the Houston area and Texas, a similar proportion of overall mobility in Klein ISD was structural (Figure A6b).** On average, about two-thirds of moves in Klein ISD, the Houston area, and Texas were structural moves.
- **Klein ISD had lower structural and non-structural summer mobility rates than the Houston area and Texas (Figure A6c).** For every 100 students, the district had about one less student entering its schools in a structural change and about three less students departing its schools in a structural change than the Houston area and Texas. For non-structural moves, the district had one less student entering schools and about two less students departing schools for every 100 students.

### Net mobility

- **More students entered schools than departed schools in Klein ISD over the summer (Figure A6c).** On average, roughly 11,700 students entered district schools over the summer and 10,700 students departed Klein ISD schools over the summer. Thus, summer mobility resulted in a net gain of about 1,000 students.
- **The net mobility for structural and non-structural moves in Klein ISD was positive.** Over the summer, the district gained an average of 480 students from structural moves (i.e. grade configuration) and an average of 520 students from non-structural moves.

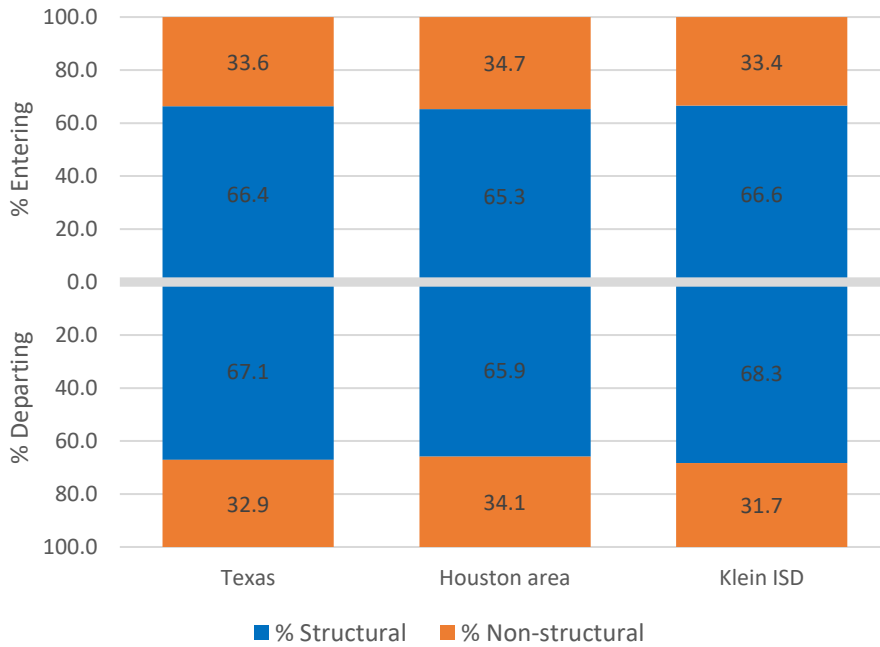
# Appendix

**Figure A6a: Overall summer mobility rates relatively stable over time in Klein ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

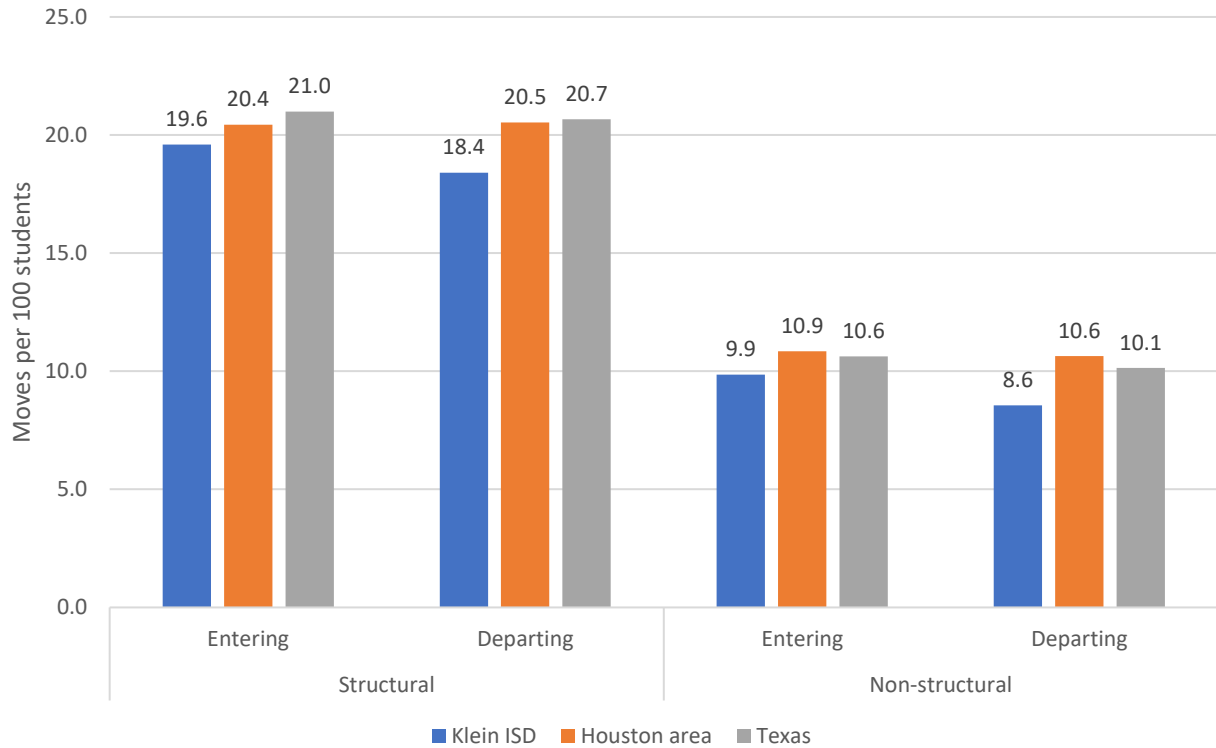
**Figure A6b: Roughly two-thirds of summer mobility was structural in Klein ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

Figure A6c: Lower structural and non-structural mobility rates in Klein ISD



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A7. Pasadena ISD

### Overall summer mobility

- **The overall summer mobility rates in Pasadena ISD were stable over the study period, and they were consistently higher than rates in the Houston area and Texas (Figure A7a).** For every 100 students in the district, an average of 35 students entered district schools and 35 students departed district schools over the summer. This was higher than both the Houston area and Texas, where about 31 per 100 students entered and departed schools over the summer.

### Structural vs. non-structural mobility

Pasadena ISD's higher overall mobility is attributable to its higher structural mobility, or the number of students who change schools because of grade configuration.

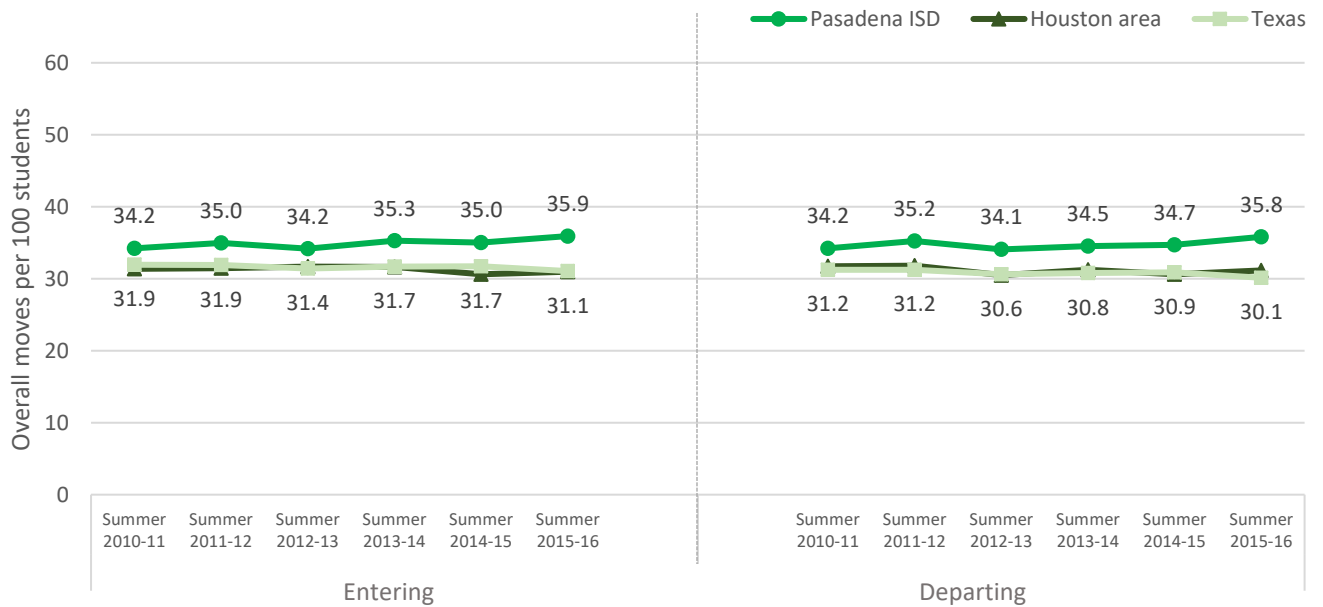
- **Compared to the Houston area and Texas, a larger proportion of overall mobility in Pasadena ISD was structural (Figure A7b).** On average, about three-quarters of moves the district were structural, whereas about two-thirds of moves in the Houston area and Texas were structural.
- **While Pasadena ISD had higher structural mobility rates than the Houston area and Texas, its non-structural mobility rates were lower (Figure A7c).** For every 100 students, the district had about four more students entering its schools and about four more students departing its schools over the summer than the Houston area and Texas. For non-structural moves, Pasadena ISD had about two fewer students entering and two fewer students departing its schools over the summer than the Houston area and state of Texas.

### Net mobility

- **In most years, slightly more students entered schools than departed schools in Pasadena ISD over the summer, but the difference was minimal (Figure A7c).** On average, roughly 15,500 students entered district schools over the summer and 15,400 students departed over the summer. Thus, mobility resulted in a net gain of 100 students, but this translates to a mobility rate of zero. Over the summer, the number of students entering and departing schools roughly balance each other out.
- **Similar to the Houston area and Texas, the net mobility rate for both structural and non-structural moves in Pasadena ISD over the summer was zero.** Over the summer, the district did not gain or lose a substantial number of students due to structural moves (i.e. grade configuration) or non-structural moves.

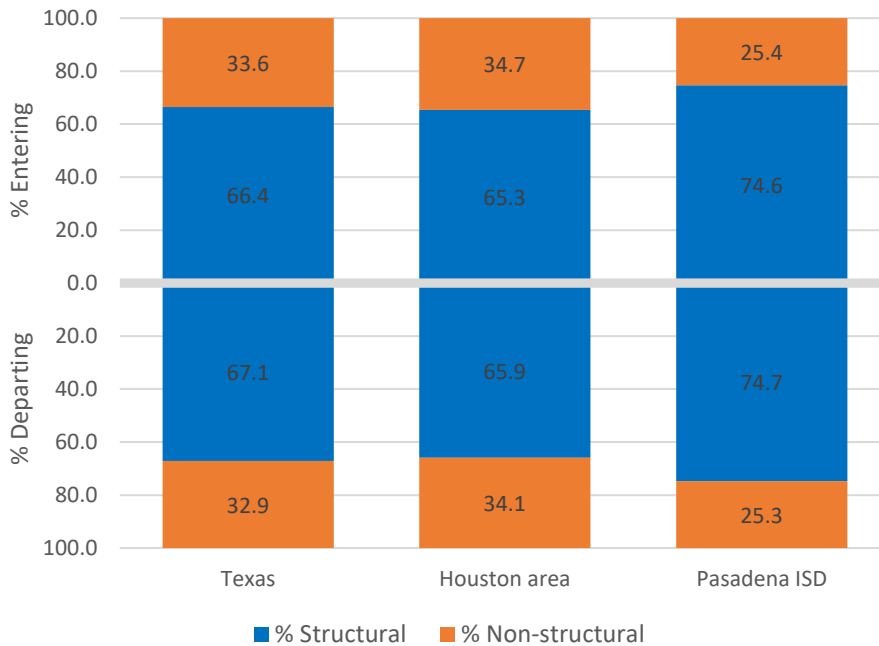
# Appendix

**Figure A7a: Overall summer mobility rates relatively stable over time in Pasadena ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

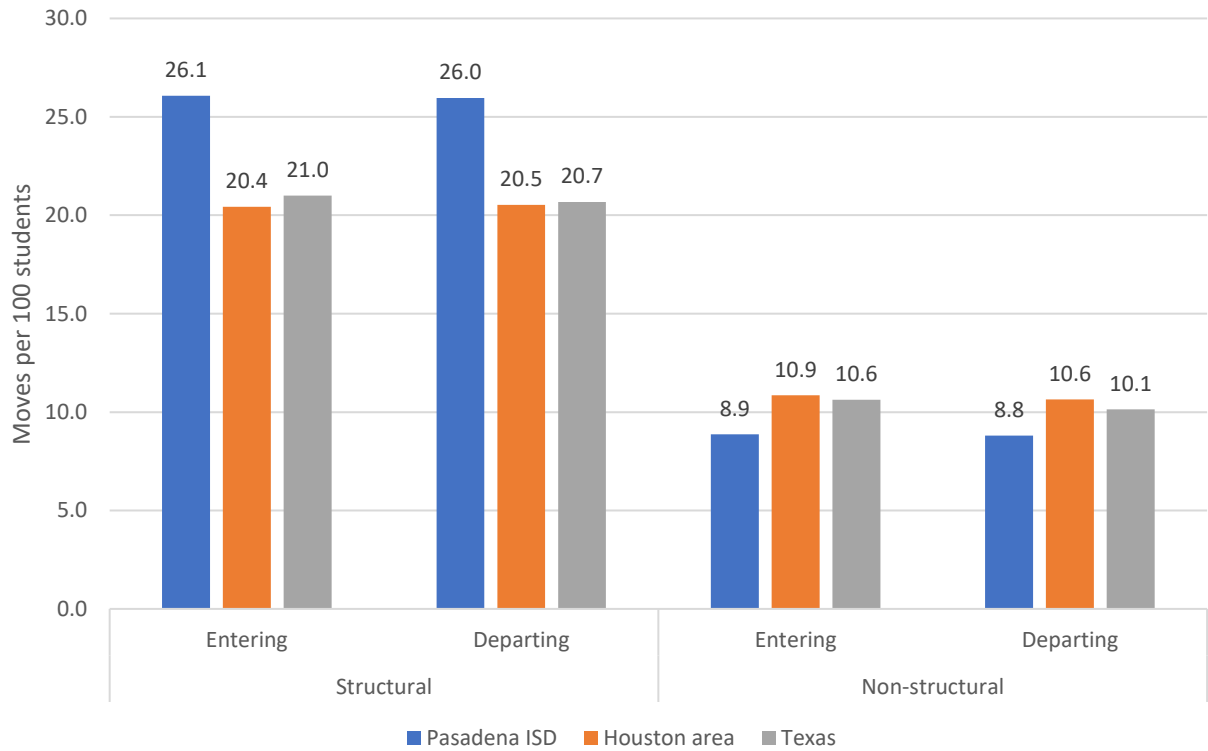
**Figure A7b: Higher rates structural mobility in Pasadena ISD than Texas and Houston area**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

**Figure A7c: Higher structural, lower non-structural mobility rates in Pasadena ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A8. Sheldon ISD

### Overall summer mobility

- **The overall summer mobility rates in Sheldon ISD fluctuated over the study period, and for most years, the rates were lower than the Houston area and Texas (Figure A8a).** For every 100 students in the district, an average of 31 students entered district schools and 29 students departed over the summer. While the rate of students entering schools was similar, the rate of students departing was lower than both the Houston area and Texas, where about 31 per 100 students departed schools over the summer.

### Structural vs. non-structural mobility

Sheldon ISD's high overall mobility is attributable to its structural mobility, or the number of students who change schools because of grade configuration.

- **Compared to the Houston area and state of Texas, a slightly smaller proportion of overall mobility in Sheldon ISD was structural (Figure A8b).** On average, about 62% of moves entering district schools and about 64% of moves departing were structural.
- **Sheldon ISD had lower structural mobility rates than the Houston area and state of Texas, but its non-structural mobility rate was higher for moves entering the district and similar for moves departing the district (Figure A8c).** For every 100 students, Sheldon ISD had about one fewer student entering and about two more students departing its schools in a structural move than the Houston area. Sheldon ISD had about one more student entering in a non-structural move than the Houston area and state of Texas.

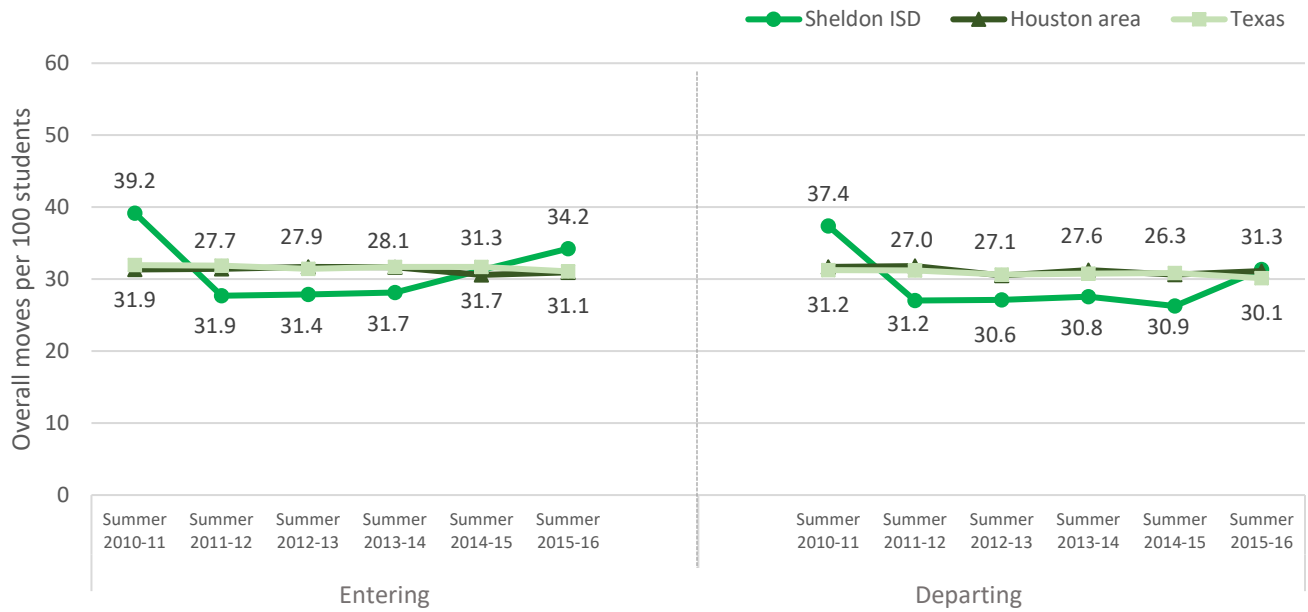
### Net mobility

- **On average, more students entered schools than departed schools in Sheldon ISD over the summer (Figure A8c).** On average, roughly 1,920 students entered district schools and 1,800 students departed district schools over the summer. Thus, summer mobility resulted in a net gain of 120 students or a net gain of two students per 100 students in the district.
- **The net mobility for structural and non-structural moves in Sheldon ISD was positive.** Over the summer, the district gained an average of 40 students from structural moves (i.e. grade configuration) and 80 students from non-structural moves.



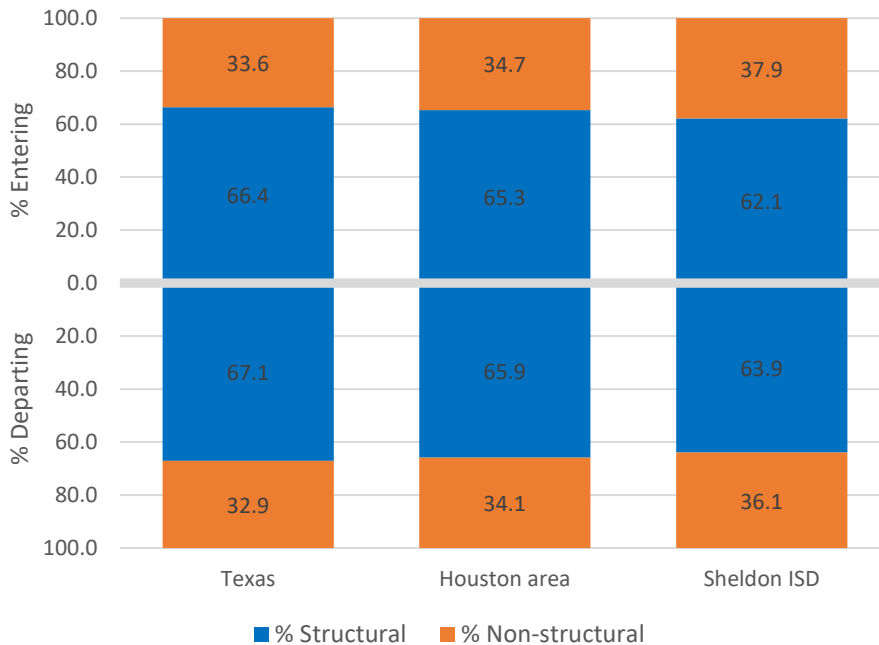
# Appendix

**Figure A8a: Overall summer mobility rates fluctuated slightly in Sheldon ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

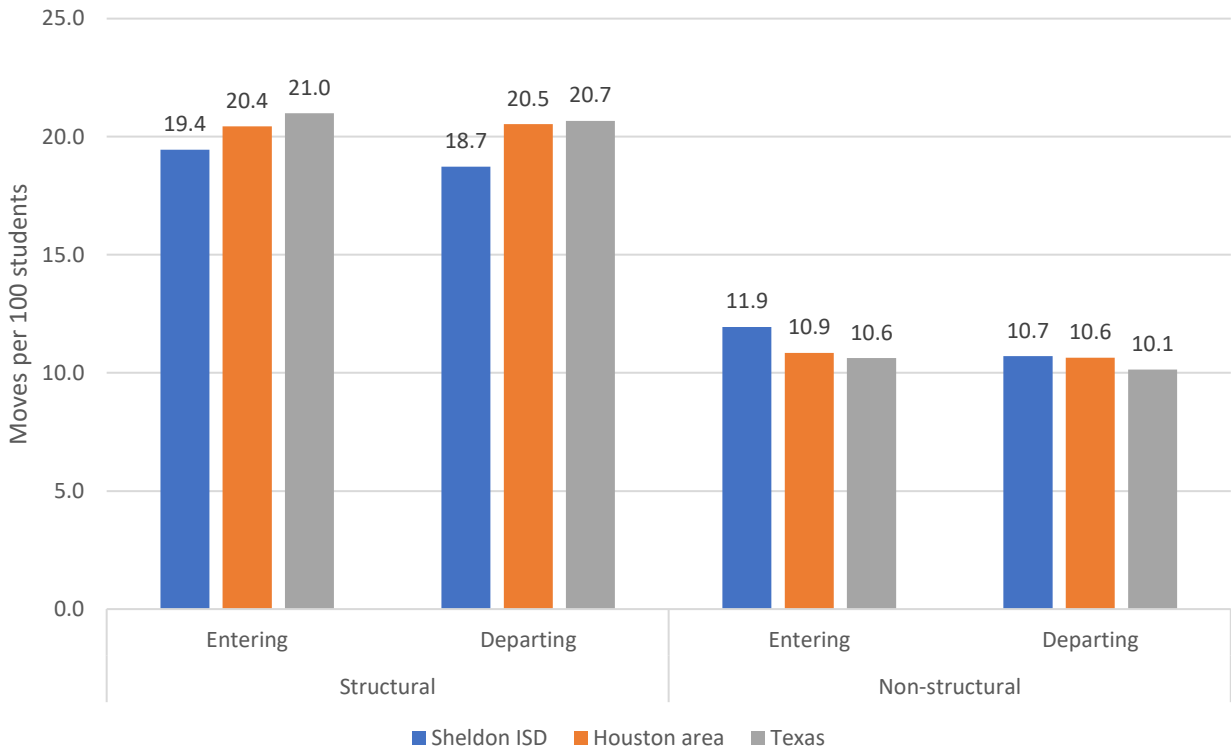
**Figure A8b: Slightly lower percentage of summer mobility was structural in Sheldon ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

**Figure A8c: Lower structural and higher non-structural entering mobility rates in Sheldon ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A9. Spring Branch ISD

### Overall summer mobility

- **The overall summer mobility rates in Spring Branch ISD were stable over the study period, and they were consistently lower than rates in the Houston area and Texas (Figure A9a).** For every 100 students in the district, an average of 27 students entered district schools and 26 students departed district schools over the summer. While the rate of students entering schools was similar, the rate of students departing schools was lower than both the Houston area and Texas, where about 31 per 100 students departed schools over the summer.

### Structural vs. non-structural mobility

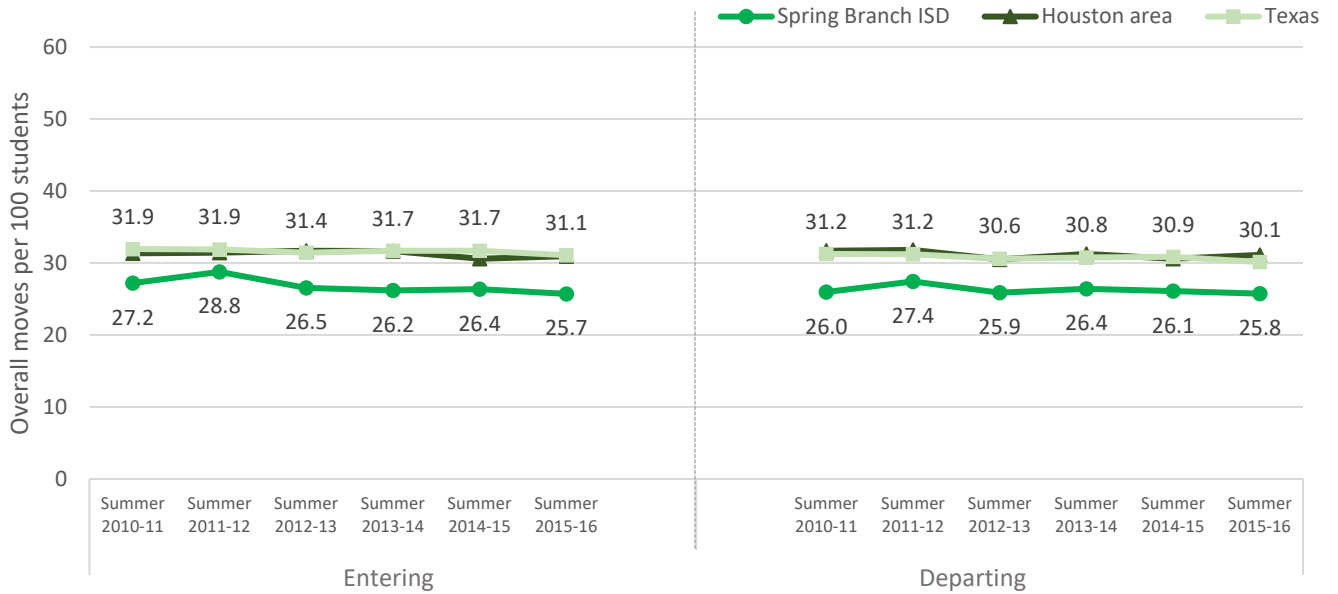
- **Compared to the Houston area and Texas, a similar proportion of overall mobility in Spring Branch ISD was structural (Figure A9b).** On average, roughly two-thirds of moves in Spring Branch ISD were structural.
- **Spring Branch ISD had lower structural and non-structural mobility rates than the Houston area and Texas (Figure A9c).** For every 100 students, Spring Branch ISD had about three fewer students entering its schools in a structural move and about two fewer students departing in a structural move over the summer. Spring Branch ISD had about two fewer students entering and departing its schools in non-structural moves compared to the Houston area and Texas.

### Net mobility

- **Over most summers, more students entered schools than departed schools in Spring Branch ISD (Figure A9c).** On average, roughly 7,450 students entered district schools over the summer and 7,300 students departed district schools over the summer. Thus, summer mobility resulted in a net gain of about 150 students that translates to a net gain of about one student per 100 in the district.
- **The net mobility for structural moves in Spring Branch ISD was positive, but the net mobility for non-structural moves was negative.** On average, the district gained about 200 students through structural moves (i.e. grade configuration) but lost about 50 through non-structural moves. However, because this number was so small, the net mobility rate for non-structural moves was close to zero, suggesting there is a balance between the number of students entering and departing Spring Branch ISD through non-structural moves.

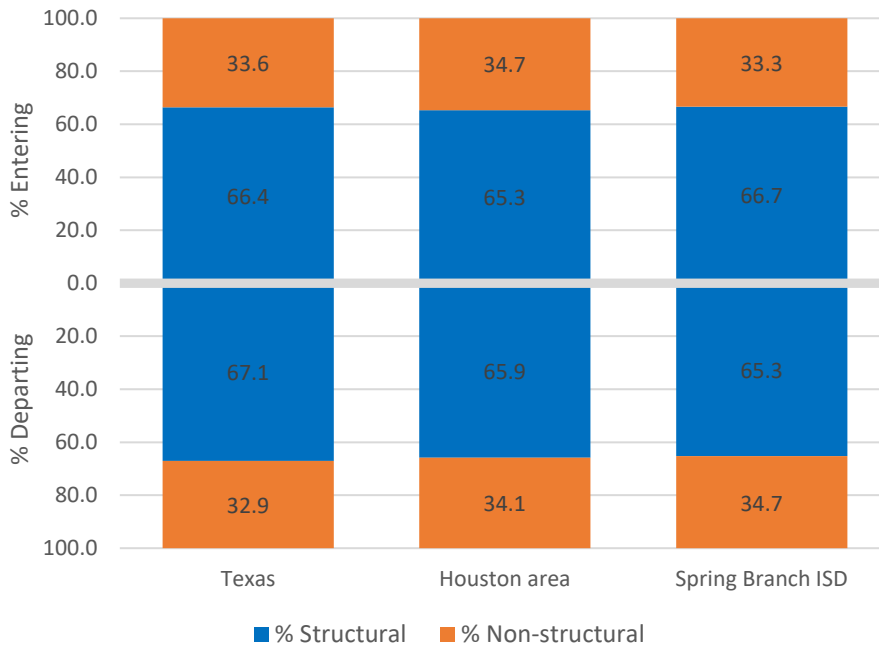
# Appendix

**Figure A9a: Overall summer mobility rates relatively stable over time in Spring Branch ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

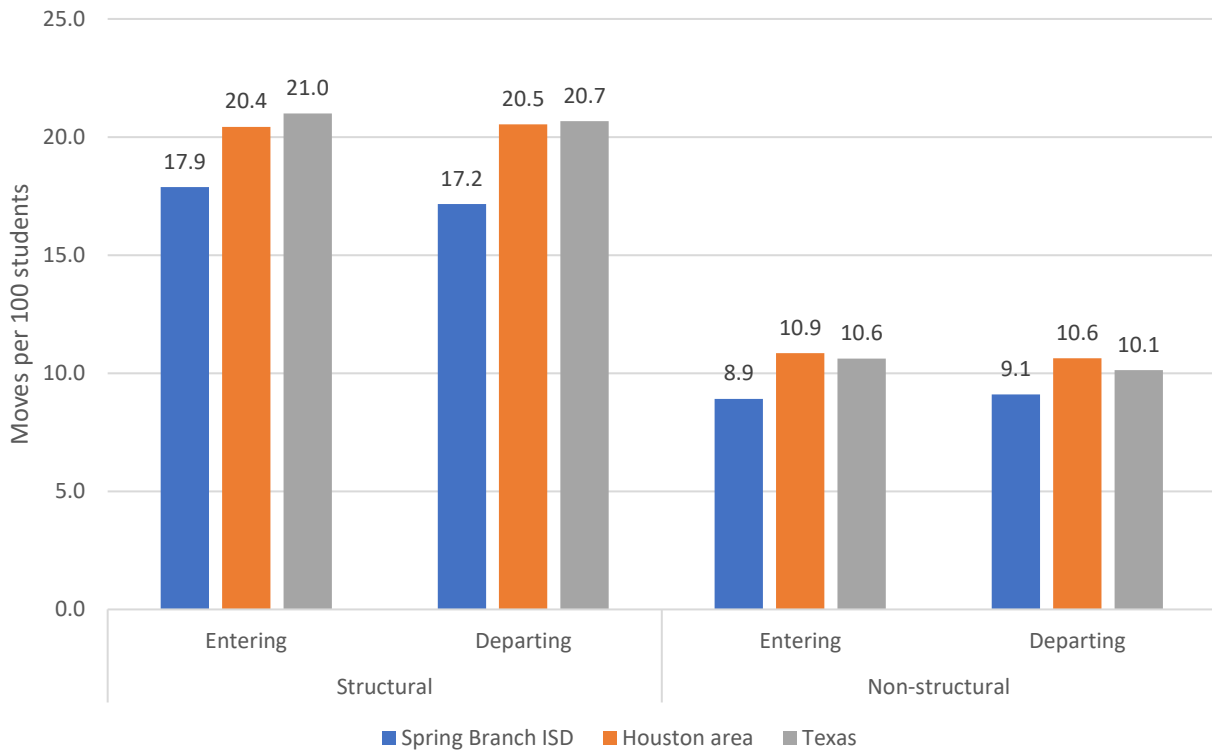
**Figure A9b: Nearly two-thirds of summer moves were structural in Spring Branch ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

Figure A9c: Lower structural and lower non-structural mobility rates in Spring Branch ISD



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

## A10. Spring ISD

### Overall summer mobility

- **The overall summer mobility rates in Spring ISD were stable over the study period, and they were generally similar to rates in the Houston area and Texas (Figure A10a).** For every 100 students in the district, an average of 31 students entered district schools and 32 students departed district schools over the summer. While the rate of students entering schools was similar, the rate of students departing schools was slightly higher than both the Houston area and Texas, where about 31 per 100 students departed schools over the summer.

### Structural vs. non-structural mobility

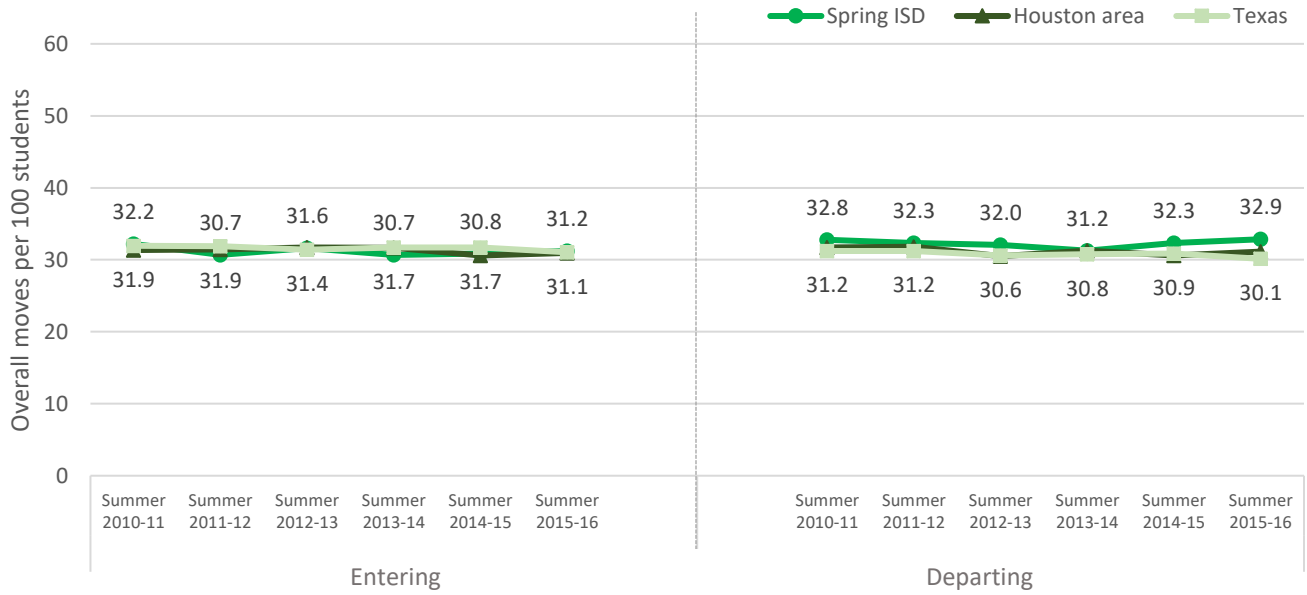
- **Compared to the Houston area and Texas, a smaller proportion of overall mobility in Spring ISD was structural (Figure A10b).** On average, about 61% of moves entering and about 59% of moves departing the district were structural, whereas over 65% of moves entering and departing the Houston area and the state of Texas were structural.
- **Spring ISD had lower structural mobility rates than the Houston area and Texas, but its non-structural mobility rates were higher (Figure A10c).** For every 100 students, the district had about two fewer students entering and departing its schools in a structural move over the summer than the Houston area and Texas. For non-structural moves, Spring ISD had about one more student entering and about three more students departing schools over the summer.

### Net mobility

- **More students departed schools than entered schools in Spring ISD over the summer (Figure A10c).** On average, roughly 9,300 students entered district schools and 9,600 students departed district schools over the summer. Thus, summer mobility resulted in a net loss of about 300 students, or one student lost per 100 students.
- **The net mobility for structural moves in Spring ISD balanced to zero, but the net mobility for non-structural moves was negative.** Over the summer, Spring ISD only lost an average of six students due to structural moves (i.e. grade configuration) which translates to a rate of zero per 100 students enrolled. However, the district lost an average of 300 students over the summer through non-structural moves. The district's net loss of students is therefore attributable to non-structural mobility.

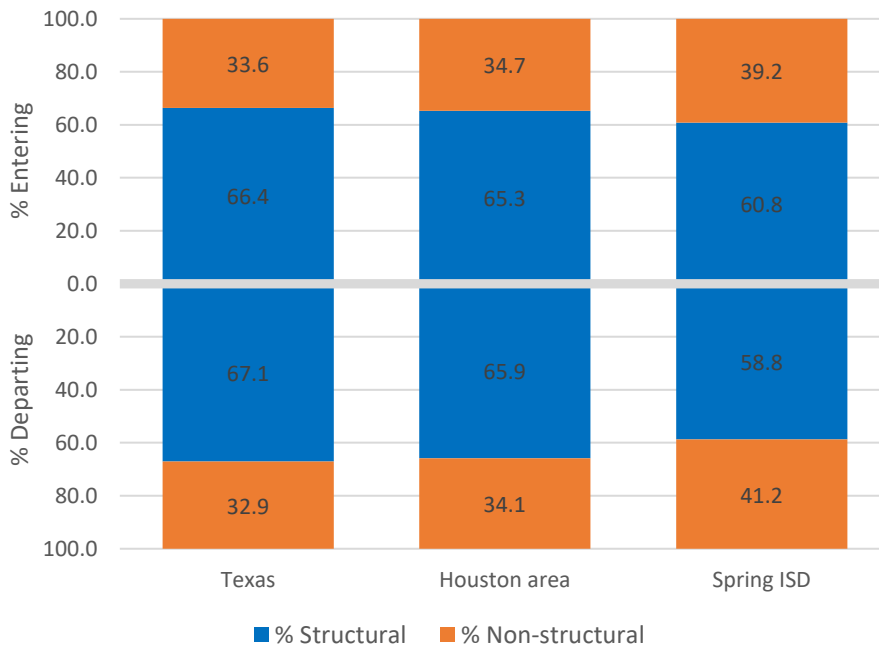
# Appendix

**Figure A10a: Overall summer mobility rates stable over time in Spring ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

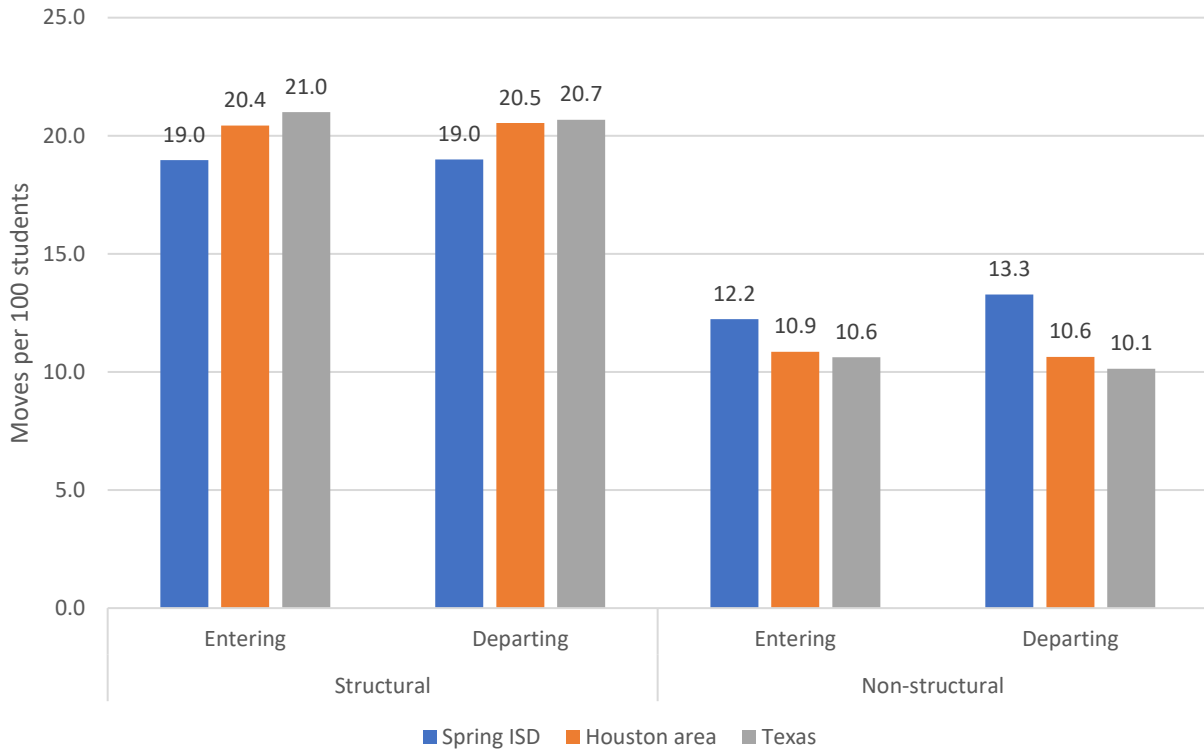
**Figure A10b: Lower proportion of mobility was structural in Spring ISD**



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years

# Appendix

Figure A10c: Lower structural, higher non-structural mobility rates in Spring ISD



Source: Texas Public Education Information Management System (PEIMS) six-week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years



## Appendix B. Data and Measurement

The main data source for this research brief is the Texas Public Education Information Management System (PEIMS) six-week attendance records file. These data contain information on all the schools a student attended during each six-week period of the school year, as long as the student was attending a Texas public school. Key variables include campus ID, district ID, and six-week indicator. For this brief, the PEIMS six-week attendance records file was used for each school year from 2010-11 through the 2016-17 school year.

To measure summer mobility, attendance records were compared from the sixth, or final, six-week attendance records of one year to the first six-week attendance records of the next year. For example, to measure summer mobility during the summer between the 2015-16 school year and the 2016-17 school year, the sixth six-weeks attendance records from the 2015-16 school year were compared to the first six-weeks attendance records from the 2016-17 school year. Note, the length of time between the sixth six-week period and the first six-week periods may have varied across Texas public school districts, but our concern is not with the length of time between the finish of one school year and the start of another, but about moves taking place while school is not in session. Still, it is possible that some of the district-to-district amounts of summer mobility were shaped by the length of the “summer” between school years. To assist with the clarity of discussion, the term “summer” is used to refer to the months following a school year. For example, the phrase “summer of 2012-13” or “2012-13 summer” refers to the time period between the 2012-13 school year and the 2013-14 school year.

For the sixth six-week period and the first six-week period, the school the student attended for the most number of days was identified, resulting in one school of attendance for the sixth six-week period and one school of attendance for the first six-week period. The most-attended school was used to make the determination of summer mobility because many students had multiple records per six-week period in the attendance file without any indicator in the file for the order in which the student attended schools. For example, if a student appeared three times in the sixth six-week attendance record and was affiliated with three different schools, the data did not provide any indication as to which school the student last attended (i.e., where they finished the school year). The same was true of the first six-week attendance record: there was no way to determine which school the student attended first if the student attended multiple schools during the first six-week period. The most-attended school was used to ensure each student only appeared once in each six-week attendance record file.

Summer mobility was measured for students enrolled in first grade through 11<sup>th</sup> grade during the sixth six-week period. Students were considered mobile if the campus ID of their most attended school changed between the sixth six-week period and the first six-week period.

To determine if a move was structural or non-structural, the grade of each mobile student was identified and compared against the highest grade offered at the school they left. If the mobile student was enrolled in the highest grade offered at the school they left, i.e., the school’s *terminal grade*, then the move was considered structural. Examples of structural moves are school changes between elementary and middle schools and between middle and high schools. One exception to this definition of structural moves involved students who were entering Texas public schools. If a student entered a Texas public school during the first six-weeks attendance period after not having previously been in a Texas public school during the sixth six-weeks attendance period of the previous year, then structural mobility was based upon the grade configuration of the school they entered. If a student entering a Texas public school entered at that school’s lowest grade level, then that student was considered to have made a structural move. For example, a student who attended a private school for kindergarten through grade 8

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and then entered a public school in Texas at the start of their ninth-grade year would be considered a structural move, if ninth grade was the lowest grade offered at the school the student entered.

School-level counts of the number of moves entering that school were produced by summing together all of the school changes that entered that particular school over the summer. School-level counts of the number of moves departing that school were produced by summing together all of the mobility that departed a school over the summer. These school-level statistics were not reported in this research brief but were used to aggregate across all schools in a district to create district-level estimates. The process of aggregation was repeated to also create estimates for the selected urban areas and then Texas. Houston area data were aggregated from the district-specific data of Aldine Independent School District (ISD), Alief ISD, Cypress-Fairbanks ISD, Houston ISD, Katy ISD, Klein ISD, Pasadena ISD, Sheldon ISD, Spring Branch ISD, and Spring ISD. Dallas-Fort Worth area data were aggregated from the district-specific data of Arlington ISD, Birdville ISD, Carrollton-Farmers Branch ISD, Castleberry ISD, Coppell ISD, Crowley ISD, Dallas ISD, Denton ISD, Duncanville ISD, Fort Worth ISD, Frisco ISD, Garland ISD, Highland Park ISD, Irving ISD, Lake Worth ISD, Lewisville ISD, McKinney ISD, Mesquite ISD, Plano ISD, and Richardson ISD. Austin area data were aggregated from the district-specific data of Austin ISD, Eanes ISD, Georgetown ISD, Hutto ISD, Lake Travis ISD, Leander ISD, Manor ISD, Pflugerville ISD, and Round Rock ISD. San Antonio area data were aggregated from the district-specific data of Alamo Heights ISD, Edgewood ISD, Harlandale ISD, Judson ISD, North East ISD, Northside ISD, San Antonio ISD, and South San Antonio ISD. El Paso area data were aggregated from the district-specific data of Canutillo ISD, El Paso ISD, Socorro ISD, and Ysleta ISD. School-level estimates of the 10 public school districts making up the Houston area will be provided in a future research product.

In addition to generating counts of summer mobility, rates of student mobility were also calculated. Rates are useful because they allow districts to see whether their mobility patterns resemble those of the Houston area and the state. Rates were calculated using enrollment counts provided by the Texas Academic Performance Rating (TAPR) system adjusted to include only the relevant grade levels (i.e., first through 11<sup>th</sup> grade) and used to show the number of school changes per 100 students.

# Appendix

## Appendix C. Table of Mobility Counts, Rates for Texas and Select Areas

Table 1. Overall, structural, and non-structural summer mobility **counts** for Texas and select areas: Summer 2010-11 to Summer 2015-16

|  | Summer 2010-11 | Summer 2011-12 | Summer 2012-13 | Summer 2013-14 | Summer 2014-15 | Summer 2015-16 | Total     | Annual average |
|--|----------------|----------------|----------------|----------------|----------------|----------------|-----------|----------------|
| <b><i>Overall number of school changes entering schools in</i></b>     |                |                |                |                |                |                |           |                |
| Texas  | 1,280,884      | 1,297,331      | 1,296,618      | 1,331,584      | 1,358,634      | 1,352,119      | 7,917,170 | 1,319,528      |
| Houston area   | 165,323        | 166,999        | 170,393        | 175,243        | 173,834        | 178,771        | 1,030,563 | 171,761        |
| Dallas-Fort Wor  | 194,003        | 197,285        | 191,494        | 195,624        | 198,842        | 198,400        | 1,175,648 | 195,941        |
| Austin area  | 51,800         | 53,204         | 52,156         | 54,545         | 53,621         | 54,193         | 319,519   | 53,253         |
| San Antonio arc  | 67,851         | 68,674         | 67,880         | 69,652         | 69,355         | 68,283         | 411,695   | 68,616         |
| El Paso area   | 37,935         | 38,134         | 36,680         | 36,321         | 36,950         | 35,145         | 221,165   | 36,861         |
| Rest of Texas  | 763,972        | 773,035        | 778,015        | 800,199        | 826,032        | 817,327        | 4,758,580 | 793,097        |
| <b><i>Overall number of school changes departing schools in</i></b>    |                |                |                |                |                |                |           |                |
| Texas  | 1,252,710      | 1,270,445      | 1,263,353      | 1,293,120      | 1,322,118      | 1,311,973      | 7,713,719 | 1,285,620      |
| Houston area   | 167,186        | 168,954        | 163,992        | 173,052        | 173,887        | 179,830        | 1,026,901 | 171,150        |
| Dallas-Fort Wor  | 194,429        | 200,464        | 194,107        | 196,525        | 201,140        | 199,976        | 1,186,641 | 197,774        |
| Austin area  | 51,861         | 53,217         | 52,335         | 54,411         | 53,423         | 52,895         | 318,142   | 53,024         |
| San Antonio arc  | 66,907         | 68,163         | 67,646         | 70,207         | 69,764         | 68,517         | 411,204   | 68,534         |
| El Paso area   | 36,501         | 37,993         | 36,593         | 35,778         | 35,621         | 34,125         | 216,611   | 36,102         |
| Rest of Texas  | 735,826        | 741,654        | 748,680        | 763,147        | 788,283        | 776,630        | 4,554,220 | 759,037        |
| <b><i>Net overall summer mobility</i></b>                              |                |                |                |                |                |                |           |                |
| Texas  | 28,174         | 26,886         | 33,265         | 38,464         | 36,516         | 40,146         | 203,451   | 33,909         |
| Houston area   | -1,863         | -1,955         | 6,401          | 2,191          | -53            | -1,059         | 3,662     | 610            |
| Dallas-Fort Wor  | -426           | -3,179         | -2,613         | -901           | -2,298         | -1,576         | -10,993   | -1,832         |
| Austin area  | -61            | -13            | -179           | 134            | 198            | 1,298          | 1,377     | 230            |
| San Antonio arc  | 944            | 511            | 234            | -555           | -409           | -234           | 491       | 82             |
| El Paso area   | 1,434          | 141            | 87             | 543            | 1,329          | 1,020          | 4,554     | 759            |
| Rest of Texas  | 28,146         | 31,381         | 29,335         | 37,052         | 37,749         | 40,697         | 204,360   | 34,060         |
| <b><i>Number of structural school changes entering schools in</i></b>  |                |                |                |                |                |                |           |                |
| Texas  | 850,889        | 860,997        | 863,682        | 883,305        | 899,451        | 898,656        | 5,256,980 | 876,163        |
| Houston area   | 108,408        | 109,626        | 109,589        | 113,870        | 114,827        | 116,814        | 673,134   | 112,189        |
| Dallas-Fort Wor  | 126,162        | 126,798        | 126,901        | 128,675        | 131,739        | 131,059        | 771,334   | 128,556        |
| Austin area  | 33,341         | 34,314         | 34,122         | 34,532         | 35,491         | 35,873         | 207,673   | 34,612         |
| San Antonio arc  | 41,904         | 42,041         | 42,091         | 42,552         | 43,081         | 41,988         | 253,657   | 42,276         |
| El Paso area   | 24,367         | 23,969         | 23,272         | 23,244         | 23,643         | 21,701         | 140,196   | 23,366         |
| Rest of Texas  | 516,707        | 524,249        | 527,707        | 540,432        | 550,670        | 551,221        | 3,210,986 | 535,164        |
| <b><i>Number of structural school changes departing schools in</i></b> |                |                |                |                |                |                |           |                |
| Texas  | 839,081        | 849,690        | 849,954        | 868,378        | 885,762        | 883,102        | 5,175,967 | 862,661        |
| Houston area   | 109,553        | 110,392        | 108,828        | 113,595        | 116,018        | 118,100        | 676,486   | 112,748        |
| Dallas-Fort Wor  | 125,646        | 127,240        | 127,100        | 128,766        | 132,452        | 131,014        | 772,218   | 128,703        |
| Austin area  | 33,151         | 34,045         | 34,153         | 34,218         | 35,458         | 35,563         | 206,588   | 34,431         |
| San Antonio arc  | 41,489         | 41,670         | 41,735         | 42,796         | 43,449         | 41,954         | 253,093   | 42,182         |
| El Paso area   | 23,307         | 23,245         | 22,746         | 22,761         | 23,066         | 21,003         | 136,128   | 22,688         |
| Rest of Texas  | 505,935        | 513,098        | 515,392        | 526,242        | 535,319        | 535,468        | 3,131,454 | 521,909        |
| <b><i>Net structural summer mobility</i></b>                           |                |                |                |                |                |                |           |                |
| Texas  | 11,808         | 11,307         | 13,728         | 14,927         | 13,689         | 15,554         | 81,013    | 13,502         |
| Houston area   | -1,145         | -766           | 761            | 275            | -1,191         | -1,286         | -3,352    | -559           |
| Dallas-Fort Wor  | 516            | -442           | -199           | -91            | -713           | 45             | -884      | -147           |
| Austin area  | 190            | 269            | -31            | 314            | 33             | 310            | 1,085     | 181            |
| San Antonio arc  | 415            | 371            | 356            | -244           | -368           | 34             | 564       | 94             |
| El Paso area   | 1,060          | 724            | 526            | 483            | 577            | 698            | 4,068     | 678            |
| Rest of Texas  | 10,772         | 11,151         | 12,315         | 14,190         | 15,351         | 15,753         | 79,532    | 13,255         |

# Appendix

*Number of non-structural school changes entering schools in*

|                 |         |         |         |         |         |         |           |         |
|-----------------|---------|---------|---------|---------|---------|---------|-----------|---------|
| Texas           | 429,995 | 436,334 | 432,936 | 448,279 | 459,183 | 453,463 | 2,660,190 | 443,365 |
| Houston area    | 56,915  | 57,373  | 60,804  | 61,373  | 59,007  | 61,957  | 357,429   | 59,572  |
| Dallas-Fort Wor | 67,841  | 70,487  | 64,593  | 66,949  | 67,103  | 67,341  | 404,314   | 67,386  |
| Austin area     | 18,459  | 18,890  | 18,034  | 20,013  | 18,130  | 18,320  | 111,846   | 18,641  |
| San Antonio are | 25,947  | 26,633  | 25,789  | 27,100  | 26,274  | 26,295  | 158,038   | 26,340  |
| El Paso area    | 13,568  | 14,165  | 13,408  | 13,077  | 13,307  | 13,444  | 80,969    | 13,495  |
| Rest of Texas   | 247,265 | 248,786 | 250,308 | 259,767 | 275,362 | 266,106 | 1,547,594 | 257,932 |

*Number of non-structural school changes departing schools in*

|                 |         |         |         |         |         |         |           |         |
|-----------------|---------|---------|---------|---------|---------|---------|-----------|---------|
| Texas           | 413,629 | 420,755 | 413,399 | 424,742 | 436,356 | 428,871 | 2,537,752 | 422,959 |
| Houston area    | 57,633  | 58,562  | 55,164  | 59,457  | 57,869  | 61,730  | 350,415   | 58,403  |
| Dallas-Fort Wor | 68,783  | 73,224  | 67,007  | 67,759  | 68,688  | 68,962  | 414,423   | 69,071  |
| Austin area     | 18,710  | 19,172  | 18,182  | 20,193  | 17,965  | 17,332  | 111,554   | 18,592  |
| San Antonio are | 25,418  | 26,493  | 25,911  | 27,411  | 26,315  | 26,563  | 158,111   | 26,352  |
| El Paso area    | 13,194  | 14,748  | 13,847  | 13,017  | 12,555  | 13,122  | 80,483    | 13,414  |
| Rest of Texas   | 229,891 | 228,556 | 233,288 | 236,905 | 252,964 | 241,162 | 1,422,766 | 237,128 |

*Net non-structural summer mobility*

|                 |        |        |        |        |        |        |         |        |
|-----------------|--------|--------|--------|--------|--------|--------|---------|--------|
| Texas           | 16,366 | 15,579 | 19,537 | 23,537 | 22,827 | 24,592 | 122,438 | 20,406 |
| Houston area    | -718   | -1,189 | 5,640  | 1,916  | 1,138  | 227    | 7,014   | 1,169  |
| Dallas-Fort Wor | -942   | -2,737 | -2,414 | -810   | -1,585 | -1,621 | -10,109 | -1,685 |
| Austin area     | -251   | -282   | -148   | -180   | 165    | 988    | 292     | 49     |
| San Antonio are | 529    | 140    | -122   | -311   | -41    | -268   | -73     | -12    |
| El Paso area    | 374    | -583   | -439   | 60     | 752    | 322    | 486     | 81     |
| Rest of Texas   | 17,374 | 20,230 | 17,020 | 22,862 | 22,398 | 24,944 | 124,828 | 20,805 |

Note: All mobility refers to both structural and non-structural school changes taking place during the summer. Structural moves are school changes resulting from a student completing the terminal grade at a school. Non-structural moves are school changes that are not due to completing the terminal grade at a school. Summer refers to the period after the school year referenced. For example, "Summer 2010-11" refers to the summer following the 2010-11 school year (and prior to the 2011-12 school year). Houston area reflects aggregated data from all ten public school districts in and around Houston city limits: Aldine Independent School District (ISD), Alief ISD, Cypress-Fairbanks ISD, Houston ISD, Katy ISD, Klein ISD, Pasadena ISD, Sheldon ISD, Spring Branch ISD, and Spring ISD.

Positive net mobility indicates more school changes entered a school than departed from a school. For example, positive net mobility for Texas public schools means more school changes entered a Texas public school than departed from a Texas public school. Negative net mobility indicates fewer school changes entered a school than departed from a school. For example, negative net mobility for Houston area public schools means fewer school changes entered a school in the Houston areas than departed from a school in the Houston area.

Source: Texas Public Education Information Management System (PEIMS) six week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years.

# Appendix

Table 2. Overall, structural, and non-structural summer mobility rates for Texas and select areas:  
Summer 2010-11 to Summer 2015-16

|   | Summer 2010-11 | Summer 2011-12 | Summer 2012-13 | Summer 2013-14 | Summer 2014-15 | Summer 2015-16 | Total | Annual average |
|---|----------------|----------------|----------------|----------------|----------------|----------------|-------|----------------|
| <i>Overall rate of school changes entering schools in</i>     |                |                |                |                |                |                |       |                |
| Texas   | 32             | 32             | 31             | 32             | 32             | 31             | --    | 32             |
| Houston area  | 31             | 31             | 32             | 32             | 31             | 31             | --    | 31             |
| Dallas-Fort Wor   | 31             | 31             | 30             | 30             | 30             | 30             | --    | 31             |
| Austin area   | 29             | 29             | 28             | 29             | 28             | 28             | --    | 28             |
| San Antonio are   | 30             | 30             | 29             | 30             | 29             | 29             | --    | 29             |
| El Paso area  | 29             | 30             | 29             | 29             | 29             | 28             | --    | 29             |
| Rest of Texas   | 33             | 33             | 32             | 33             | 33             | 32             | --    | 33             |
| <i>Overall rate of school changes departing schools in</i>    |                |                |                |                |                |                |       |                |
| Texas   | 31             | 31             | 31             | 31             | 31             | 30             | --    | 31             |
| Houston area  | 32             | 32             | 31             | 31             | 31             | 31             | --    | 31             |
| Dallas-Fort Wor   | 31             | 32             | 30             | 30             | 31             | 30             | --    | 31             |
| Austin area   | 29             | 29             | 28             | 29             | 28             | 27             | --    | 28             |
| San Antonio are   | 29             | 29             | 29             | 30             | 29             | 29             | --    | 29             |
| El Paso area  | 28             | 29             | 29             | 28             | 28             | 27             | --    | 28             |
| Rest of Texas   | 32             | 31             | 31             | 31             | 31             | 30             | --    | 31             |
| <i>Net overall summer mobility rate</i>                       |                |                |                |                |                |                |       |                |
| Texas   | 1              | 1              | 1              | 1              | 1              | 1              | --    | 1              |
| Houston area  | 0              | 0              | 1              | 0              | 0              | 0              | --    | 0              |
| Dallas-Fort Wor   | 0              | -1             | 0              | 0              | 0              | 0              | --    | 0              |
| Austin area   | 0              | 0              | 0              | 0              | 0              | 1              | --    | 0              |
| San Antonio are   | 0              | 0              | 0              | 0              | 0              | 0              | --    | 0              |
| El Paso area  | 1              | 0              | 0              | 0              | 1              | 1              | --    | 1              |
| Rest of Texas   | 1              | 1              | 1              | 2              | 2              | 2              | --    | 1              |
| <i>Rate of structural school changes entering schools in</i>  |                |                |                |                |                |                |       |                |
| Texas   | 21             | 21             | 21             | 21             | 21             | 21             | --    | 21             |
| Houston area  | 21             | 21             | 20             | 21             | 20             | 20             | --    | 20             |
| Dallas-Fort Wor   | 20             | 20             | 20             | 20             | 20             | 20             | --    | 20             |
| Austin area   | 18             | 19             | 18             | 18             | 18             | 18             | --    | 18             |
| San Antonio are   | 18             | 18             | 18             | 18             | 18             | 18             | --    | 18             |
| El Paso area  | 19             | 19             | 18             | 18             | 19             | 17             | --    | 18             |
| Rest of Texas   | 22             | 22             | 22             | 22             | 22             | 22             | --    | 22             |
| <i>Rate of structural school changes departing schools in</i> |                |                |                |                |                |                |       |                |
| Texas   | 21             | 21             | 21             | 21             | 21             | 20             | --    | 21             |
| Houston area  | 21             | 21             | 20             | 21             | 20             | 20             | --    | 21             |
| Dallas-Fort Wor   | 20             | 20             | 20             | 20             | 20             | 20             | --    | 20             |
| Austin area   | 18             | 18             | 18             | 18             | 18             | 18             | --    | 18             |
| San Antonio are   | 18             | 18             | 18             | 18             | 18             | 18             | --    | 18             |
| El Paso area  | 18             | 18             | 18             | 18             | 18             | 17             | --    | 18             |
| Rest of Texas   | 22             | 22             | 21             | 21             | 21             | 21             | --    | 21             |
| <i>Net structural summer mobility rate</i>                    |                |                |                |                |                |                |       |                |
| Texas   | 0              | 0              | 0              | 0              | 0              | 0              | --    | 0              |
| Houston area  | 0              | 0              | 0              | 0              | 0              | 0              | --    | 0              |
| Dallas-Fort Wor   | 0              | 0              | 0              | 0              | 0              | 0              | --    | 0              |
| Austin area   | 0              | 0              | 0              | 0              | 0              | 0              | --    | 0              |
| San Antonio are   | 0              | 0              | 0              | 0              | 0              | 0              | --    | 0              |
| El Paso area  | 1              | 1              | 0              | 0              | 0              | 1              | --    | 1              |
| Rest of Texas   | 0              | 0              | 1              | 1              | 1              | 1              | --    | 1              |

# Appendix

*Rate of non-structural school changes **entering** schools in*

|                 |    |    |    |    |    |    |    |    |
|-----------------|----|----|----|----|----|----|----|----|
| Texas           | 11 | 11 | 10 | 11 | 11 | 10 | -- | 11 |
| Houston area    | 11 | 11 | 11 | 11 | 10 | 11 | -- | 11 |
| Dallas-Fort Wor | 11 | 11 | 10 | 10 | 10 | 10 | -- | 11 |
| Austin area     | 10 | 10 | 10 | 11 | 9  | 9  | -- | 10 |
| San Antonio are | 11 | 12 | 11 | 12 | 11 | 11 | -- | 11 |
| El Paso area    | 11 | 11 | 10 | 10 | 11 | 11 | -- | 11 |
| Rest of Texas   | 11 | 11 | 10 | 11 | 11 | 10 | -- | 11 |

*Rate of non-structural school changes **departing** schools in*

|                 |    |    |    |    |    |    |    |    |
|-----------------|----|----|----|----|----|----|----|----|
| Texas           | 10 | 10 | 10 | 10 | 10 | 10 | -- | 10 |
| Houston area    | 11 | 11 | 10 | 11 | 10 | 11 | -- | 11 |
| Dallas-Fort Wor | 11 | 12 | 11 | 10 | 11 | 10 | -- | 11 |
| Austin area     | 10 | 10 | 10 | 11 | 9  | 9  | -- | 10 |
| San Antonio are | 11 | 11 | 11 | 12 | 11 | 11 | -- | 11 |
| El Paso area    | 10 | 11 | 11 | 10 | 10 | 10 | -- | 11 |
| Rest of Texas   | 10 | 10 | 10 | 10 | 10 | 9  | -- | 10 |

***Net** non-structural summer mobility rate*

|                 |   |   |   |   |   |   |    |   |
|-----------------|---|---|---|---|---|---|----|---|
| Texas           | 0 | 0 | 0 | 1 | 1 | 1 | -- | 0 |
| Houston area    | 0 | 0 | 1 | 0 | 0 | 0 | -- | 0 |
| Dallas-Fort Wor | 0 | 0 | 0 | 0 | 0 | 0 | -- | 0 |
| Austin area     | 0 | 0 | 0 | 0 | 0 | 1 | -- | 0 |
| San Antonio are | 0 | 0 | 0 | 0 | 0 | 0 | -- | 0 |
| El Paso area    | 0 | 0 | 0 | 0 | 1 | 0 | -- | 0 |
| Rest of Texas   | 1 | 1 | 1 | 1 | 1 | 1 | -- | 1 |

Note: All mobility refers to both structural and non-structural school changes taking place during the summer. Structural moves are school changes resulting from a student completing the terminal grade at a school. Non-structural moves are school changes that are not due to completing the terminal grade at a school. Summer refers to the period after the school year referenced. For example, "Summer 2010-11" refers to the summer following the 2010-11 school year (and prior to the 2011-12 school year). Houston area reflects aggregated data from all ten public school districts in and around Houston city limits: Aldine Independent School District (ISD), Alief ISD, Cypress-Fairbanks ISD, Houston ISD, Katy ISD, Klein ISD, Pasadena ISD, Sheldon ISD, Spring Branch ISD, and Spring ISD.

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Source: Texas Public Education Information Management System (PEIMS) six week attendance records file, 2011-12 to 2012-13 through 2015-16 to 2016-17 between school years.

**About HERC.** Focusing on the most pressing challenges facing the region, the Houston Education Research Consortium (HERC) is a research-practice partnership between Rice University and 11 Houston-area school districts. HERC aims to improve the connection between education research and decision making for the purpose of equalizing outcomes by race, ethnicity, economic status, and other factors associated with inequitable educational opportunities.



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