LATINO MIGRATION AND TRENDS IN PRIVATE AND CHARTER SCHOOL ENROLLMENTS

Jacob Hibel
Department of Sociology
University of California, Davis
jhibel@ucdavis.edu

Matthew Hall
Department of Policy Analysis and Management
Cornell Population Center
Cornell University

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Abstract

We use three decades of demographic data on U.S. school districts to assess the association between growth in the Latino school-age population and the availability of alternative schooling options as well as white student concentration in schools of choice relative to traditional public schools. Results from our analysis indicate that growing Latino child populations are associated with increase in the number of private and charter schools within district boundaries. In addition, white students become increasingly concentrated in private and charter schools as the Latino child population increase, particularly in ‘nonestablished’ Latino school districts (where Latino children’s presence is historically recent).
LATINO MIGRATION AND TRENDS IN PRIVATE AND CHARTER SCHOOL ENROLLMENTS

The United States’ Latino population has increased dramatically over the past 50 years, driven by an immigration boom and comparatively high fertility. The resulting increases in population diversity are most dramatic among the youngest segments of the U.S. population. While Latinos make up roughly 16% of the total US population, they account for close to 25% of the under-18 population and an even greater share of new births (Ennis, Rios-Vargas, and Albert 2011). As America thus projects to grow increasingly diverse over the coming years, the educational system has come to the fore as the primary institution in which trajectories of immigrant incorporation, interethnic relations, and social equality will be established.

However, even as school systems grow ever more important, countervailing forces may undermine the community-level benefits to diversity and impede schools’ ability to successfully integrate Latino children into the mainstream. Demographic research has suggested that as communities diversify, they simultaneously grow segregated (Iceland 2004; Logan, Stults, and Farley 2004; Parisi, Lichter, and Taquino 2015), particularly in school district settings where diversification often leads to the concentration of minority children in particular schools. These segregating processes may be especially pronounced in new immigrant destination areas in which Latino growth is recent, rapid, and unfamiliar (Hall 2013; Hall and Crowder 2014; Lichter et al. 2010).

In this paper, we estimate the extent to which Latino student population growth in U.S. school districts is associated with growth in the availability of alternative schooling options and changes in student segregation across school types during the 1990s and 2000s. More specifically, we use special Census tabulations on population change in school districts –
normalized to account for administrative changes to school district boundaries – between 1980 and 2010 to assess the association between school-age Latino population growth and changes in the number of private and charter schools within district boundaries, as well as changes in the gap between non-Latino white students’ proportional enrollment in schools of choice and traditional public schools. Given the diffusion of Latino populations to communities with little prior history of Latino migration in recent years, we examine how these processes differ across school districts located in established and non-established Latino destination areas.

**Background**

A striking characteristic of contemporary Latino migration is the expansion of migrant flows beyond “established” gateways to destinations with comparatively short Latino in-migration histories. One consequence of Latino population growth in new destinations is that local populations and institutions in these communities are experiencing the opportunities and challenges associated with ethnic diversification for the first time. Contrasted with established gateway communities in which non-Latino neighbors and school systems alike are comparatively familiar with Latinos’ language, culture, and history, new gateways are potential sites of more frequent and consequential interethnic conflict surrounding schooling.

A substantial body of work has emerged to assess the impacts of Latino movement to new destinations (see Goździak and Martin 2005; Massey 2008; Singer 2004, 2009; Zúñiga and Hernández-León 2005). Among other areas for concern, this research has documented the possibility of emerging educational stratification in new Latino destinations. In particular, research has found that Latino students in new destinations are less likely than white students to enroll in advanced courses, have limited access to linguistic services, (Dondero and Muller 2012), report higher levels of perceived discriminatory treatment (Perreira, Fluigni, and
Potochnick 2009), and have elevated rates of high school dropout (Fischer 2010). These educational challenges are partially offset by some institutional and demographic advantages present in new destination schools (Dondero and Muller 2012; Fry 2011; Stamps and Bohon 2006) but there are signs that these advantages erode as the pace of Latino population growth accelerates and schools face increasing pressure to adapt to a new and diverse student population (Fry 2011).

Of the many goals U.S. educators and policymakers seek to achieve, providing equal educational opportunities to all children has proven to be a persistently formidable task. Racial and ethnic achievement gaps have remained stubbornly static over the past three decades, while achievement disparities between wealthy and poor students have grown increasingly wide (Reardon 2011). Further, racial, ethnic, and socioeconomic segregation across schools and school districts remains a defining characteristic of U.S. public education, isolating increasing numbers of Latino and African American students in racially homogenous schools struggling with the challenges of concentrated socioeconomic disadvantage. There are multiple causes of this increasing (re)segregation of American schools, including relative declines in in many metropolitan areas’ non-Latino white, school-age populations (Fiel 2013), as well as “white flight” from neighborhoods and school districts with growing minority populations (Crowder, Hall, and Tolnay 2011; Pais, South, and Crowder 2009).

White flight through residential mobility is a comparatively dramatic reaction to community ethnic diversification, however, and non-Latino white parents may pursue alternate means of exercising homophilous preferences for their children’s schools. Private schools have long provided white and high-SES parents living in diverse school districts with opportunities to send their children to schools with more homogenous student bodies than their neighborhood
public schools provide. Indeed, research has shown that private school enrollment among white children increases modestly as local minority shares increase (Fairlie and Resch 2002; Li 2009; Renzulli and Evans 2005; Wrinkle, Stewart, and Polinard 1999). As market-based neoliberal education reforms swept the nation during the 1990s and 2000s, a second avenue for school-based white flight became available to a much broader segment of families through charter and voucher programs. In school districts in 42 states and the District of Columbia, parents who previously might not have been able to enroll their children in private schools now have the option of pursuing publicly funded education in an alternative school setting through these policy reforms. While charter and voucher proponents have argued that these policies should provide parents and communities with greater freedom to enact their educational preferences while creating incentives for all schools to improve, researchers have found that virtual white flight to charter schools has led to increasing within-community racial segregation across schools (Renzulli and Evans 2005). The confluence of these migration and school enrollment behaviors may lead schools in communities experiencing Latino in-migration to grow increasingly racially segregated, as recent research indicates that growing Latino populations are linked to enhanced school segregation within (and across nearby) districts (Reardon and Yun 2001; Clapp and Ross 2004). Consequently, young Latino school children are more segregated from whites than any other Latino age group (Jargowsky 2014).

Data and Methods

To analyze the association between Latino student population growth and the emergence of alternative (and potentially segregative) schooling options within a school district, we use special tabulations of census data on the residential populations that compose school districts in the U.S.
Specifically, we use data from the 1980, 1990, 2000, and 2010 special tabulations of Summary File 1 prepared by the Census Bureau for the National Center for Educational Statistics to assess how changes in the Latino school-age (5-17 year-old) populations are linked to subsequent changes in both the number of private and charter schools in each school district and well as the gap between the proportion of private and charter school students identified as non-Latino white and the proportion of white students in traditional public schools. Using school district IDs, names, and locations, we compile these data in longitudinal, panel format. We resolve the boundaries and coverage units of these areas using an updated version of the database assembled by Corcoran and Evans (2010) on district change. Specifically, five major types of administrative change can occur: 1) name change; 2) consolidation (e.g., elementary and secondary district combine into a unified district); 3) merger (e.g., geographically proximate districts can combine into a single district); 4) dissolution (e.g., a unified district dissolves into separate primary and secondary districts); and 5) split (e.g., a single district divides into two or more smaller districts).

While we can identify each of these changes, only the first three types can be resolved in our models since they involve the combination of smaller units into larger ones (e.g., normalizing the boundaries of a merger between two districts in 1990 involves aggregating the counts for both districts in 1980 and 1970). In contrast, district splits, where a large district separates into two smaller ones, cannot be reconstructed in prior years.¹ Fortunately, the number of unresolvable district changes is very small. Indeed, only four school districts in the United States have split since 1980, and dissolutions typically involve the same underlying residential population. Hence, in terms of district governance change, the overwhelming tendency has been toward

¹ Restructuring district populations based on future changes requires complete knowledge of the spatial boundaries of districts and access to geographically-smaller census units that fit within the districts, neither of which are available for the vast majority of districts before 1990.
consolidation (see Hoy and Miskel 2012; Strang 1987).\textsuperscript{2} To account for possible attenuation bias resulting from the normalization of district boundaries, our models include indicators of whether a district’s population has been imputed based on future administrative change.

We make several restrictions to the initial sample of all school districts. First, consistent with prior related work (Corcoran and Evans 2010), we limit our analysis to unified districts and elementary-only districts, excluding high school-only districts, as well as a small number of vocational, special education, and other districts oriented toward specific populations (e.g., correctional system schools). Second, we drop districts with residential populations that never exceed 1,000 total persons and remove districts with enrollments below 100 students. Our final analytic sample includes 12,252 school districts, capturing approximately 84\% of all school districts and covering about 94\% of all students in public schools.\textsuperscript{3}

There are four main dependent variables in this study. First, we model changes in within-district counts of private schools from 1989 to 2012. Because private schools do not belong to public school districts (and thus there are no administrative data linking private schools to the district boundaries in which they are located), we used private schools’ latitude-longitude coordinates reported in the 2008-2009 and 2009-2010 Private School Universe Surveys conducted by the National Center for Education Statistics (NCES) to link private schools first to census tracts and subsequently to the georeferenced longitudinal school district dataset described above\textsuperscript{4}. We treat these within-district private school counts as measures of the local set of private

\textsuperscript{2} It is plausible that growth in the minority population is related to educational governance change – i.e., whether a set of districts consolidate (or not) may be influenced by changing racial demographics of one or more of the districts. Educational research has found some evidence that racially dissimilar neighborhood areas are less likely to consolidate than racially similar ones (Bassington 2003; also see Martinez-Vazquez et al 1997; Lichter et al 2007; Bischoff 2008).

\textsuperscript{3} The specific coverage rates vary by year with 81.7\% of districts captured in 1990 (and 94.1\% of all students), 82.8\% of districts in 2000 (95.3\% of all students), and 88.4\% of districts in 2010 (94.2\% of all students).

\textsuperscript{4} This approach thus excludes private schools that closed during the 1989-2008 period, potentially leading to underestimates of private school growth.
school alternatives for residents of each district, and hypothesize that increasing demand for such schooling alternatives will be reflected in a positive association with Latino student population growth.

Our second dependent variable is the yearly within-district count of public charter schools over the 1998-2012 period, taken from NCES’s yearly Public School Universe Surveys. Similar to the availability of private school options within district boundaries, we hypothesize that charter school growth will be positively associated with Latino child population growth as diversification creates demand for alternative schools of choice among white parents.

The third and fourth dependent variables analyzed in the present study measure the difference between the proportion of a district’s private and charter students, respectively, who are non-Latino white and the proportion of traditional public school students who are non-Latino white. Operationalized as Private(or Charter) % White - Traditional Public % White, positive scores on these variables thus represent the clustering of white students in schools of choice, while negative values reflect greater diversity in schools of choice than in traditional public schools. We hypothesize that both of these measures will be positively associated with Latino child population growth, reflecting white flight-driven disparities in school enrollment.

The primary independent variable in this study is change in the school-age Latino population between decades. In particular, we tabulate changes between subsequent census years in the number of Hispanic children between 5 and 17 years of age residing in the census tracts that compose each public school district.

Motivated by the recent growth of Latino populations in areas with little prior history of Latino migration and theoretical arguments suggesting that whites’ responses to Latinos may differ in these areas, we stratify our results based on school districts’ historical Latino settlement
patterns. To do so, we follow previous research on ‘new destinations’ to classify districts as either an established Latino settlement area or a non-established one. Specifically, established Latino destinations are districts in which one of the following set of criteria are met: a) the Latino share of the total residential population exceeded the year-specific national share and more than 10,000 Latinos resided in the district; b) the Latino population share was twice the national average; or c) there were more than 50,000 Latinos living in the district. All other areas are considered to be nonestablished districts.\(^5\) By the end of our study period, 11.4% of all school districts were considered established destinations by our approach, including large urban districts such as Tucson (AZ) Unified School District as well as smaller districts such as San Ysidro (CA) Elementary School District. The remaining 88.6% of districts are considered nonestablished areas.

To overcome the risk that any observed association between Latino population change and the count or composition of schools is spurious to concurrent changes in the socioeconomic context or housing market conditions of school districts, we also include measures of change in poverty rates and new housing construction (built within last 10 years). To isolate the effect of changes in the childhood Latino population from the effect of Latino population size, we also adjust for the logged total population of each school district and the proportion of residents who are Latino. All models also adjust for school district type (0=unified; 1=elementary) and the number of other schools of choice present in the district (i.e., charter school models control for the number of private schools in the district, and vice versa). Finally, the full models include state fixed-effects, which are particularly important in our charter school analyses as the adoption of charter school policies vary from state to state.

\(^5\) In supplemental analyses, we further disaggregated this category into emerging gateways and nongateways. Migration processes, however, appear to operate similarly in these types of areas so we grouped them together as nonestablished areas for a more parsimonious presentation.
Our analytic approach is largely descriptive. Specifically, we estimate random coefficient models predicting growth trajectories for each outcome as a function of changes in school-age Latino populations during preceding decades (1980-2000). We allow these trajectories to vary according to school districts’ destination type to test the hypothesis that Latino child population growth spurs greater growth in the availability of schooling alternatives and the clustering of white students in schools of choice in nonestablished Latino destinations than in established destinations.

[Tables 1 & 2 Here]

Results

Tables 1 and 2 present selected results from models predicting within-district private school and charter school outcomes, respectively. Model 1 for each dependent variable presents coefficients from a simplified model including only time, Latino child population change, and destination type as predictors, and the same coefficients from the full analytic model including all covariates are presented in the Model 2 column.

[Figures 1-4 Here]

Because our model specification strategy relies on two- and three-way interaction terms to represent the processes of interest, the results may be more readily interpreted graphically than in tabular form. Figures 1 through 4 present fitted values for each outcome over time at the 10th and 90th percentiles of Latino child population change, presented separately for nonestablished and
established districts. All predictions are based on models including the complete set of covariates and state fixed-effects.

Figure 1 presents predictions from models estimating the number of private schools within district boundaries. These fitted trajectories demonstrate that established Latino destination districts tend to have more private schools than nonestablished districts in a given year, and the number of private schools in these districts tends to increase over time. While established destination districts at the 90th percentile of Latino child population change are predicted to have a greater number of private schools than established districts at the 10th percentile of Latino child population change, their longitudinal growth trajectories are not appreciably different. Latino child population changes do, however, shift the private school growth trajectory in nonestablished Latino destination districts. Nonestablished destinations at the 10th percentile of Latino child population change have comparatively few private schools, and models do not predict change in this count over time. By contrast, a high level of Latino child population growth is associated with a steep increase the predicted number of private schools appearing in nonestablished Latino destinations over the 24-year study window.

Figure 2 presents fitted trajectories for the difference in percentage of white students in private and public schools over time. Established Latino destination districts, which have comparatively long histories of Latino migration, tend to demonstrate greater clustering of white students in private schools than nonestablished destination districts. However, while this measure of segregation does not appear especially responsive to changes in the Latino child population in established destination districts, nonestablished destination school districts experience steep increases in predicted white student concentration in private schools when Latino child
population change is high and relatively little change at the low end of the Latino child population growth distribution.

Figures 3 and 4 correspond to Figures 1 and 2, respectively, substituting charter schools for private schools as the outcomes of interest. The trajectories presented in Figure 3 suggest that, conditional on the full set of model covariates, charter schools are slightly more prevalent in established compared to nonestablished Latino destination districts. However, charter school emergence does not appear to be tightly linked to Latino child population change in either type of district.

Figure 4 presents predicted values of white student concentration in charter schools relative to traditional public schools over time. White students are slightly overrepresented in charter schools located in established Latino destinations, and this difference grows over time, particularly in districts experiencing high levels of Latino child population growth. The tendency for white students to become concentrated in charter schools as the Latino child population grows is particularly pronounced in nonestablished Latino destination districts, however. This pattern is comparable to Figure 2’s predictions for white student segregation in private schools located in high-Latino-growth, nonestablished destination districts.

Discussion

Fueled by heightened international migration and fertility, the U.S. Latino child population has grown considerably in recent years. Unlike previous decades, however, much of this new growth is occurring outside of the established gateways in which Latinos have historically settled. The upshot of the growth and diffusion of Latinos throughout the U.S. is that many communities are grappling with the cultural, social, economic, and institutional consequences of Latino-driven
diversification for the first time. Of central concern to debates about Latinos’ cultural and structural incorporation is whether the educational systems in new destinations are able to effectively support young Latinos as they transition from childhood into the workforce (Alba 2009, 2013; Lee and Bean 2010; Lichter 2013; Telles and Ortiz 2008). While previous work has explored educational achievement in new destinations (Clotfelter, Ladd, and Vigdor 2012; Dondero and Muller 2012; Fischer 2010; Potochnick 2014), far less is known about how a growing Latino student population may shape public school systems’ social compositions.

Using longitudinal data on school districts’ residential and school populations, we modeled the associations between Latino school-age population change and subsequent changes in the availability of alternative schooling options as well as white student concentration in these schools of choice. Our findings suggest that across all public school districts, expanding Latino youth populations are associated with increases in the number of private and charter schools. More dramatic, however, was the significant, positive association between Latino child population growth and white student concentration in schools of choice relative to traditional public schools.

As implied by prior work on racial avoidance and white flight, we found that the sensitivity of white student concentration in private and charter schools to Latino child population change was conditioned by certain key historical and contextual factors. In particular, white enrollments in established Latino school districts – those with comparatively long histories of Latino presence – demonstrated comparatively low responsiveness to Latino student population growth. By contrast, white students in school districts in which Latino student population growth was a comparatively recent phenomenon grew rapidly and substantially more concentrated in private and charter schools between 1998 and 2012.
As the first longitudinal, national analysis of school district-level migration and school availability and enrollment patterns, this study makes several unique contributions. Our findings suggest that schooling options become more numerous and between-school segregation more pronounced as local Latino student populations increase, particularly in new destination communities. These patterns portend challenges for communities experiencing unprecedented Latino population growth, as white avoidance of high-minority public schools will likely exacerbate resource and learning opportunity inequalities across schools.

There are several limitations to our analysis that we and other researchers would profit from addressing in future work. Foremost, despite our efforts to control for changes in the underlying socioeconomic context and secular trends in school district population change, our estimates of the link between growth in Latino child populations and school availability and enrollment changes are strictly associational and do not necessarily imply that expanding Latino child populations trigger the educational decisions of white residents in a strictly causal sense. Micro-level analyses of white parents’ school choices would offer additional information on how white residents respond to growing Latino populations.

Our findings underscore a few of the many the challenges inherent to our era of growing racial/ethnic heterogeneity, deepening school segregation, and expanding economic inequality. To the extent that white families’ selective departure from traditional public schools in districts experiencing increasing Latino student populations depletes the financial, social, and political resources accruing to those schools and contributes to ethnic balkanization, this population trend may be undermining the academic success of Latino children, the most rapidly expanding segment of the American population. For this crucial reason, it will be important for future research to identify the manifold consequences of the patterns described in the present study.
References


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<th>Number of Private Schools</th>
<th>Private-Public Gap in White Percent Enrollment</th>
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<td>1</td>
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<td>Established Destination</td>
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<td>(0.245)</td>
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<td>Years Post-1998</td>
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<td>Δ Latino Child Population</td>
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<td>(0.000)</td>
<td>(0.000)</td>
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<tr>
<td>Years X Δ Latino</td>
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<td>0.000***</td>
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<tr>
<td></td>
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<td></td>
<td>(0.076)</td>
<td>(0.675)</td>
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Model 2 includes all covariates and state fixed effects
+ p<.10, * p<.05, ** p<.01, *** p<.001
Table 2. Selected Coefficients; Random Coefficient Models for Charter School Outcomes

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<td>2</td>
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<tr>
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<td>8.673*** (-2.229)</td>
<td>-5.907 (-4.268)</td>
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<tr>
<td>Years Post-1998</td>
<td>0.003*** (0.000)</td>
<td>0.004*** (-0.001)</td>
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<tr>
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<td>-0.075 (-0.096)</td>
<td>-0.049 (-0.143)</td>
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<td>Δ Latino Child Population</td>
<td>-0.000*** (0.000)</td>
<td>-0.000*** (-0.000)</td>
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<td></td>
<td>-0.017** (-0.006)</td>
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<tr>
<td>Years X Δ Latino</td>
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<td>0.000*** (-0.000)</td>
</tr>
<tr>
<td></td>
<td>0.002*** (0.000)</td>
<td>0.001** (-0.000)</td>
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<td>0.231 (-0.283)</td>
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<tr>
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<td>0.000*** (-0.000)</td>
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<td></td>
<td>0.002 (0.003)</td>
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<tr>
<td>Years X Δ Latino X Established</td>
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<td>-0.000*** (0.000)</td>
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<tr>
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<td>-0.001* (0.000)</td>
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<tr>
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<td>1.668 (1.137)</td>
<td>-23.180 (22.942)</td>
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Model 2 includes all covariates and state fixed effects
+ p<.10, * p<.05, ** p<.01, *** p<.001
Figure 1. Predictive Margins from Full Model Estimating Number of Private Schools in Nonestablished and Established Latino Destinations

![Number of Private Schools in District](image1)

- Nonestablished Districts
- Established Districts
- 10th Pctile Latino Change
- 90th Pctile Latino Change

Figure 2. Predictive Margins from Full Model Estimating the Private-Public White Student Enrollment Gap in Nonestablished and Established Latino Destinations

![Private-Public White Enrollment Gap](image2)

- Nonestablished Districts
- Established Districts
- 10th Pctile Latino Change
- 90th Pctile Latino Change
Figure 3. Predictive Margins from Full Model Estimating Number of Charter Schools in Nonestablished and Established Latino Destinations

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\caption{10th Pctile Latino Change \quad 90th Pctile Latino Change}
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Figure 4. Predictive Margins from Full Model Estimating the Charter-Public White Student Enrollment Gap in Nonestablished and Established Latino Destinations

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