Latino Migration and Trends in Private and Charter School Enrollments

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Recent decades have seen tremendous growth in the school-age Latino population of the United States, to the point that nearly one in four U.S. children is of Latino descent. A defining characteristic of this population shift is the increasing geographic dispersion of Latino households beyond traditional gateway communities to new immigrant destinations. This diffusion of Latinos to 'new destinations' means that a wider mix of American individuals and communities are reaping the benefits and dealing with the challenges of cultural diversity. A substantial body of work has emerged to assess the impacts of Latino movement to new destinations (see 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 due in part to non-Latino white and high-SES residents' disinvestment in public schools. The market-based educational reform movement that swept the country during the 1990s and 2000s created a particular avenue for such disinvestment, as "virtual white flight" to charter schools has led to increasing racial segregation across schools (Renzulli and Evans 2005).

In this paper, we offer an assessment of how growth in local Latino populations is associated with changes in the availability of alternative schooling options (i.e., charter and private schools), as well as with changes in the racial/ethnic composition of these "schools of choice" compared to traditional public schools in the same communities. To do so, we use census data on the residential populations that compose school districts in the U.S. linked to administrative data on schools from the Department of Education. Specifically, we use special tabulations of the 1990 and 2000 decennial censuses (SF1) produced for the National Center for Educational Statistics to assess changes in Latino and non-Latino white populations since 1990, when the geographic dispersion of Latinos accelerated and their presence in communities with little history of Latino settlement expanded rapidly (Lichter and Johnson 2009; Singer 2005). We link these census data to administrative panel data on all public (including traditional and charter) schools from 1998-2012, to and private schools from 1989-2009. We are specifically interested in the possibility that Latino in-migration is associated with expanding use of charter and public schools, especially by non-Latino white families. We further examine the possibility that the association between Latino migration and local educational responses varies across immigrant destination contexts, with Latino in-migration having more dramatic social and political consequences in new Latino gateways than in regions with longer histories of Latino settlement.

Data and Methods: Data for this project come from a variety of sources on school district resources and racial and class compositions of their encompassing areas. First, to link school districts over time, we use data from Corcoran and Evans (2010) on all administrative district changes between 1970 and 2000, and an updated list of more recent changes from the U.S. Department of Education. These data are then linked to summary-level data from the 1990 and 2000 decennial censuses. Detailed school- and district-level composition data are made available through the National Center for Education Statistics' Common Core of Data.

The primary independent variable in this study is change in the school-aged Latino population between 1990 and 2000. In particular, we tabulate changes between these subsequent census years in the number Latino children who are eligible to enter public schools – those 5 to 17 years of age. We examine the association between this measure and four time-varying outcomes: 1) the proportion of public K-12 schools classified as charter schools within each

school district; 2) the proportion of all K-12 schools in each zip code area classified as private; and differences in the proportion of non-Latino white students attending 3) traditional public vs. charter schools within each district, and 4) public vs. private schools within each zip code.

Motivated by the recent growth of Latino populations in areas with little prior history of Latino migration, we allow these associations to vary according to school districts' historical Latino settlement patterns. To do so, we follow previous research on 'new destinations' to classify districts into one of four types of Latino contexts: established gateways, newly-emerging gateways, developing gateways, and nongateways (see Hall and Crowder 2015). Specifically, established districts are areas in which one of the following set of criteria are met: a) the Latino share of the total residential population exceeded the national share in 2000 (12.5%) and there were more than 10,000 Latinos living in the district; b) the Latino share was twice the national average (25.0%); or c) there were more than 50,000 Latinos living in the district. Newly-emerging gateway districts refer to areas where the Latino population has grown rapidly since 1980 and, by 2000, become an emerging area of settlement for Latinos. Specifically, we require emerging gateway districts to meet one of the following criteria: a) at least 1,000 Latinos, and Latino shares and Latino growth rates during the 1990s above the national average; or b) at least 1,000 Latinos and Latino growth rates during the 1990s twice as fast as the national average. Developing gateway districts refer mostly to smaller districts that have experienced very recent but explosive growth in their Latino populations. These areas are defined as having at least 500 Latinos and growth rates during the 1990s at least two times the national rate. All other districts are considered nongateways. In 2000, about 9% of all school districts are considered to be established gateways by our approach, including areas such as Tucson (AZ) Unified School District and San Ysidro (CA) Elementary School District. Another 8% of all districts were emerging gateways, including areas such as Memphis (TN) City School District and Greenville (SC) County School District, and Washington (UT) County School District. Developing gateways make up about 4% of the districts in our data and include areas such as Fremont County (ID) School District and Papillion-LaVista (NE) School District. The remaining 79% of all school districts in the U.S. are considered to be Latino nongateways.

For the present proposal, our analytic approach involves estimating linear growth curve models for each outcome. Results from these models provide estimates of baseline differences in each dependent variable across immigrant destination types, as well as differences in each outcome's linear growth over time.

Preliminary Results
Examinations of each outcome's empirical growth trajectories suggest that Latino destination type is a salient moderator of each educational trend. For example, Figures 1 and 2 present trajectories of charter and private schools' proportionate local representations, respectively. Established gateways are distinct from other contexts in both cases, demonstrating a substantially more rapid increase in the availability of charter school options as well as a greater representation of private schools over the study period. Figures 3 and 4 present longitudinal trends in the local gap between proportionate white enrollments in public vs. charter and private schools, respectively. Positive values represent comparatively higher white enrollments in public schools, while negative values indicate higher white enrollments in schools of choice. Charter schools located in districts with histories of Latino migration tend to enroll higher proportions of non-Latino white students than the traditional public schools in their district, while the opposite is true in non-gateway districts (Figure 3). A similar pattern emerges in Figure 4's comparison of public and private schools in common zip codes, though a more dramatic racial disparity is evident in established Latino destinations than in new or developing gateways.

In our preliminary growth curve analyses, we model the associations between growth in school districts' school-age Latino populations during the 1990s and changes in the proportionate availability of charter and private schools, as well as changes in white student enrollments in these schools of choice relative to traditional public schools. As a first step toward formally testing immigrant gateway context as a moderator of these associations, we estimate models separately by gateway designation as well. All models adjust for the logged local population size.

Table 1 presents results of models predicting changes in the proportion of schools classified as charters. Results reflect the overall secular trend of increasing charter school availability resulting from the expansion of school choice policies during the 1990s and 2000s. However, districts that experienced more growth in the Latino child population experienced more-rapid annual charter school growth. However, disaggregating the analysis by gateway type suggests that only this link is only evident among school districts with comparatively long histories of Latino migration, as districts in developing and non-gateway regions have predicted negative associations between Latino population change and yearly growth in charter school availability (although only significantly so for nongateways).

Compared to charter schools, private schools do not appear to be as closely linked to Latino settlement. The analyses reported in Table 2 do not reveal a consistent pattern of association between Latino population change and the proportion of a zip code's schools classified as private. However, our ongoing research plans (discussed below) involve developing a more fine-grained measure of private schools' community contexts than our current zip code measure, which we expect will provide greater leverage for identifying local Latino effects.

Table 3 presents the results of models predicting local differences between the proportion of traditional public school students who are white and the proportion of charter school students who are white. Negative values indicate a comparatively higher proportion of white students in charter schools, while positive scores represent the opposite scenario. There appears to be an overall trend of increasing racial disparity in student enrollment between traditional and charter schools over time, and this pattern is particularly evident in school districts with comparatively recent Latino immigration histories (i.e., those in newly emerging and developing gateways). The number of new Latino students added to the district during the 1990s was not strongly or consistently associated with either baseline race gaps in enrollment or with the rate at which these gaps changed over time, however.

The final set of preliminary results presented in this proposal concerns white student enrollment gaps between traditional public and private schools. This outcome is coded similarly to Table 3's dependent variable, with negative values indicating white students' comparatively higher enrollment in private as opposed to public schools. As reported in the first column of results, across all districts growth in the Latino student population is associated with more rapidly increasing disparities in white student enrollments between private and public schools. However, the most dramatic distinction exists between established gateways' baseline enrollment disparities (reflected in the model intercept coefficient) and those of new, developing, and non-gateway communities. As Figure 4 also demonstrates, private schools in these communities enroll an especially high percentage of non-Latino white students compared to their neighboring traditional public schools.

Ongoing Research
As we continue developing this project, our efforts are primarily directed toward two goals: developing a stronger and more elaborate set of controls to better isolate the association

between Latino population change and patterns of charter and private school enrollment, and building a dataset linking private schools to the public school district boundaries in which they are geographically located. We are well underway toward achieving both of these objectives, particularly with respect to gathering data on school districts' sociodemographic contexts pertaining both to community-level factors (e.g., poverty, crime, residential mobility) and institutional characteristics (e.g., public school funding levels, teacher-student ratios, student body demographic characteristics). By the time of the 2015 PAA meetings, we fully anticipate having a completely developed analysis of this important population and policy issue.

References

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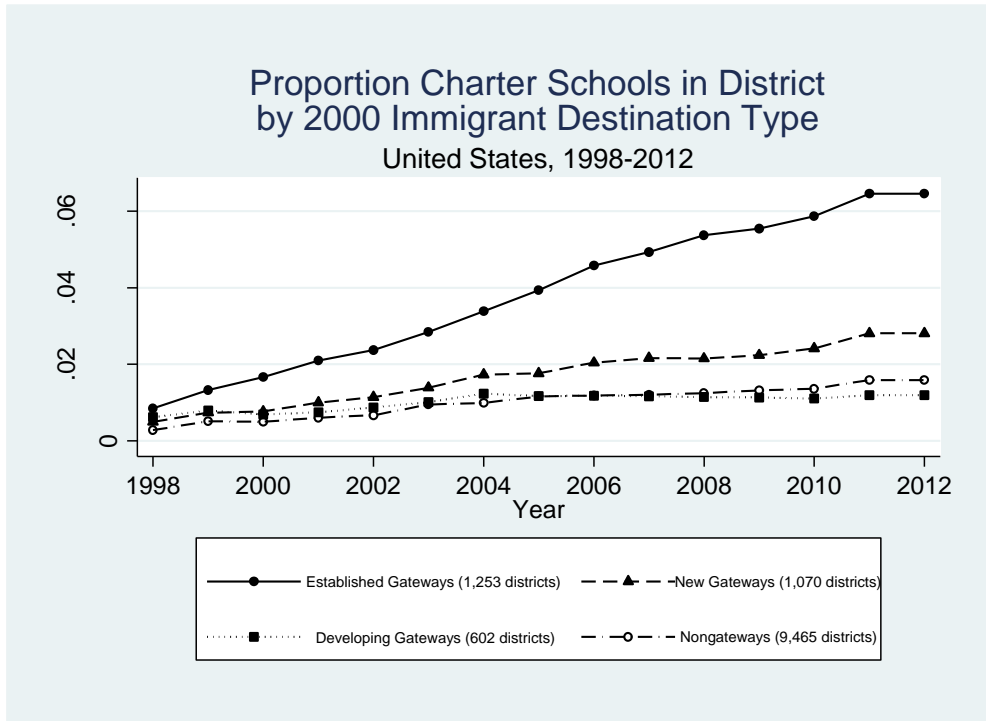
Figure 1.

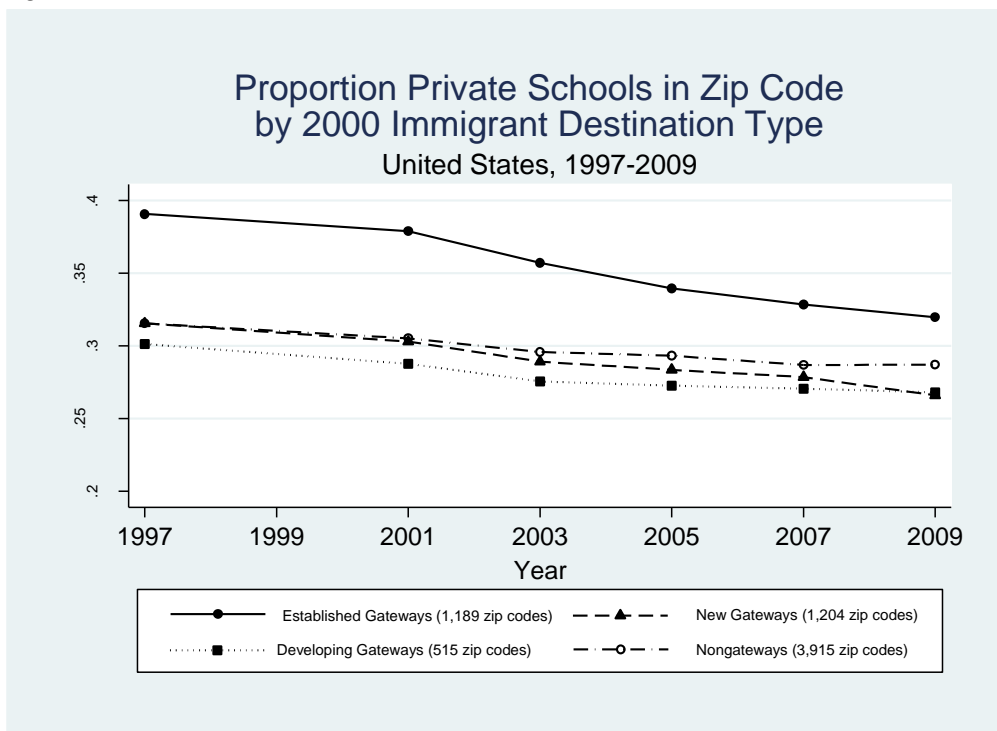Proportion Charter Schools in District
by 2000 Immigrant Destination Type
United States, 1998-2012

Established Gateways (1,253 districts)   New Gateways (1,070 districts)

Developing Gateways (602 districts)   Nongateways (9,465 districts)

Figure 2.

Proportion Private Schools in Zip Code
by 2000 Immigrant Destination Type
United States, 1997-2009

Established Gateways (1,189 zip codes)   New Gateways (1,204 zip codes)

Developing Gateways (515 zip codes)   Nongateways (3,915 zip codes)

Figure 3.

Public-Charter White Enrollment Gap
by 2000 Immigrant Destination Type
United States, 1998-2012

Figure 4.

Public-Private White Enrollment Gap
by 2000 Immigrant Destination Type
United States, 1999-2009

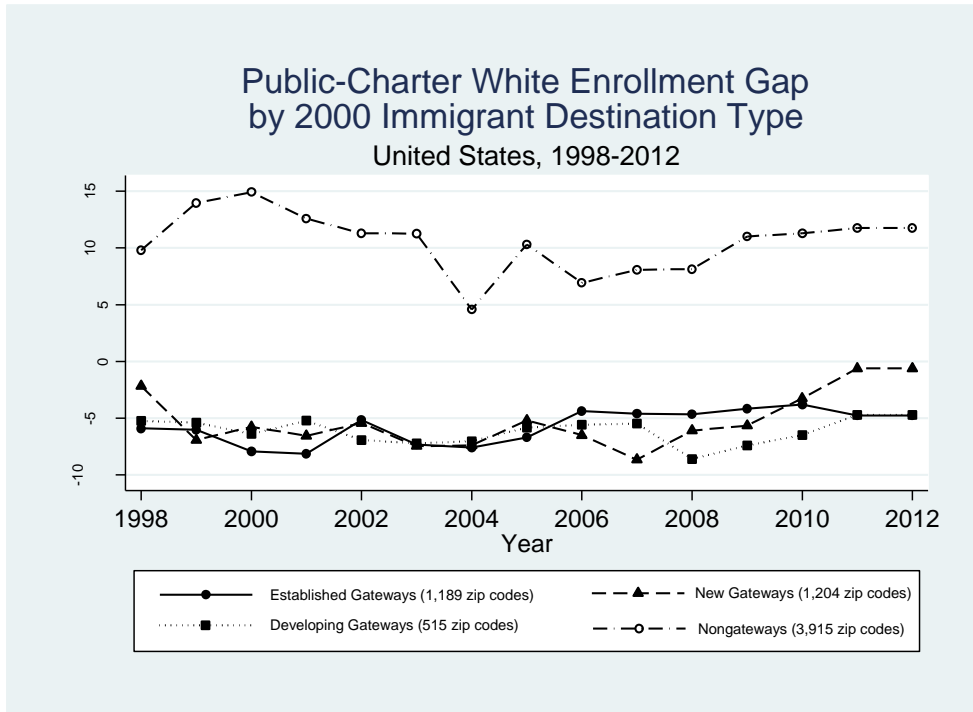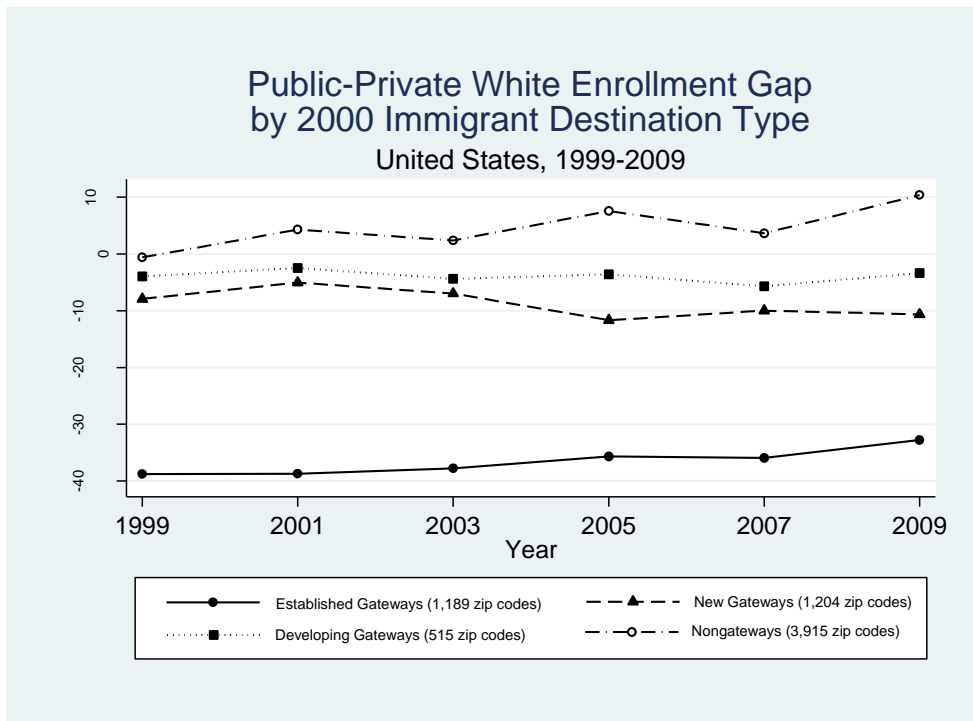## Table 1. Linear Models Predicting the Proportion of Districts' Schools Classified as Charters

	(1) All Districts	(2) Established Gateways	(3) New Gateways	(4) Developing Gateways	(5) Non-Gateways
Year	0.065*** (0.001)	0.144*** (0.006)	0.050*** (0.006)	0.035*** (0.007)	0.057*** (0.001)
Δ Latino Pop. 1990-2000 [1]	0.003 (0.003)	0.001 (0.005)	0.002 (0.020)	0.008 (0.062)	0.117* (0.057)
Year*Δ Latino	0.001*** (0.000)	0.001** (0.000)	0.007*** (0.001)	-0.001 (0.007)	-0.010*** (0.003)
Log Pop.	0.114*** (0.025)	0.197 (0.103)	0.013 (0.129)	0.105 (0.146)	-0.003 (0.031)
Intercept	-0.822*** (0.233)	-1.148 (0.997)	0.162 (1.327)	-0.620 (1.472)	0.125 (0.272)
N	177961	17773	15772	9019	135397

1: coefficients for Latino change are multiplied by 100
Standard errors in parentheses
* p<.05, ** p<.01, *** p<.001

Table 2. Linear Models Predicting the Proportion of Zip Codes' Schools Classified as Private

	(1) All Districts	(2) Established Gateways	(3) New Gateways	(4) Developing Gateways	(5) Non-Gateways
Year	-0.001*** (0.000)	-0.002*** (0.000)	-0.001*** (0.000)	-0.001 (0.000)	-0.001*** (0.000)
Δ Latino Pop. 1990-2000 [1]	-0.000 (0.000)	-0.000 (0.000)	-0.002*** (0.001)	0.002 (0.004)	0.004*** (0.001)
Year*Δ Latino	-0.000 (0.000)	0.000 (0.000)	0.000** (0.000)	-0.000 (0.000)	-0.000*** (0.000)
Log Pop.	0.050*** (0.001)	0.057*** (0.003)	0.065*** (0.005)	0.001 (0.006)	0.014*** (0.002)
Intercept	-0.147*** (0.013)	-0.251*** (0.042)	-0.363*** (0.062)	0.266*** (0.066)	0.179*** (0.019)
N	32427	4088	5162	2630	18927

1: coefficients for Latino change are multiplied by 100
Standard errors in parentheses
* p<.05, ** p<.01, *** p<.001

Table 3. Linear Models Predicting Public vs. Charter White Enrollment Gaps

	(1) All Districts	(2) Established Gateways	(3) New Gateways	(4) Developing Gateways	(5) Non-Gateways
Year	-0.097*** (0.022)	0.039 (0.064)	-0.319*** (0.069)	-0.212** (0.075)	-0.015 (0.026)
Δ Latino Pop. 1990-2000[1]	0.004 (0.004)	0.011 (0.006)	-0.199** (0.069)	0.185 (0.366)	0.429*** (0.092)

Year*Δ Latino	-0.001*	-0.001	-0.009	-0.070	-0.075***
	(0.000)	(0.001)	(0.006)	(0.043)	(0.011)
Log Pop.	-3.540***	0.397	1.607*	-1.088	-3.415***
	(0.133)	(0.353)	(0.676)	(0.877)	(0.259)
Intercept	28.040***	-25.924***	-28.018***	4.395	29.008***
	(1.456)	(4.311)	(7.285)	(8.874)	(2.515)
N	33252	4486	4988	2420	16985

1: coefficients for Latino change are multiplied by 100
Standard errors in parentheses
* p<.05, ** p<.01, *** p<.001

Table 4. Linear Models Predicting Public vs. Private White Enrollment Gaps

	(1) All Districts	(2) Established Gateways	(3) New Gateways	(4) Developing Gateways	(5) Non-Gateways
Year	-0.036	-0.343*	-0.165	0.465	0.033
	(0.036)	(0.157)	(0.159)	(0.245)	(0.118)
Δ Latino Pop. 1990-2000[1]	-0.039**	-0.025	0.016	-0.025*	0.050*
	(0.012)	(0.017)	(0.112)	(0.011)	(0.021)
Year*Δ Latino	-0.001	0.000	-0.019	-0.004**	-0.054**
	(0.001)	(0.002)	(0.011)	(0.001)	(0.017)
Log Pop.	-0.645*	3.308***	2.792	-0.768	0.217
	(0.316)	(0.866)	(1.650)	(3.115)	(0.784)
Intercept	6.820	-42.353***	-32.864	10.769	0.987
	(3.499)	(10.440)	(18.121)	(31.533)	(8.155)
N	11798	1001	846	256	1212

1: coefficients for Latino change are multiplied by 100
Standard errors in parentheses
* p<.05, ** p<.01, *** p<.001