

# Long-Term Enrollment Decline

**Its Rate, Causes, Geographical Extent,  
and Cost**

Los Angeles Unified School District  
*Independent Analysis Unit*

February 13, 2019

Andrew Thomas, Ph.D., and Sydney Ganon

The views expressed herein are those of the Independent Analysis Unit and do *not* necessarily reflect those of the District, the Board of Education, or any individual Board Member.

## EXECUTIVE SUMMARY

Both public and private K-12 schools in the L.A. Unified attendance area, L.A. County, and several other counties in the state have experienced over a decade of enrollment decline. Lower enrollment has dramatic effects on District operations because lower enrollment means less revenue. Reduced population (because of lower birth rates and net out-migration from the L.A. Unified attendance boundary) is the primary cause of enrollment drop in the Los Angeles region and elsewhere—there are simply fewer potential students in the area and less demand for K-12 schooling services.

Enrollment decline is a painful reality for L.A. Unified, but it is gradual, slow and predictable. The downward trend will stabilize and rebound slightly in the medium-to-long term, but L.A. Unified will not recover all lost enrollment and must contend with being a smaller district than it was in the past. Therefore, the District must strategically manage its decline by right-sizing, achieving efficiencies, and maintaining or increasing enrollment share where possible.

This report contains a description of the structural features of the declining environment, including its antecedents and consequences. In analyzing these structural features, the IAU found opportunities to expand the District's proportion of overall available enrollment. We also make recommendations for managing the decline.

### Highlights

***Overall, in the last 15 years, since 2003-2004, the L.A. Unified boundary area has experienced:***

- Decrease in births: 18%
- Decrease in population of 5 to 17-year-olds: 19%
- Decline in K-12 enrollment for public, private & home school sectors: 19% (870,000 to 715,000)
- Decrease in all public-school enrollment: 18% (from about 750,000 to 621,000 students)
- Decrease in District-operated (incl. affiliated charters) school enrollment: 34% (from 717,000 to 509,000)
- Decrease in District-operated kindergarten: 27% (54,000 to 40,000)

***Geographical Features of Enrollment Decline:***

- California enrollment overall decreased by 78,000 in the last 15 years, but not all counties or districts lost enrollment.
- L.A. County enrollment dropped by 251,000 in the last 15 years. Lower birth rates in the county and net migration from L.A. County to other counties in the state explain much of this decline.
- The decrease in L.A. Unified area enrollment (including independent charters) accounted for about half of the county's enrollment decline; other districts in the county made up for the rest.
- The neighboring counties of Kern and Riverside have gained 30,000 and 64,000 students respectively in this period. Both counties are more affordable than L.A. County.
- Some counties in California that have gained enrollment are no more affordable than L.A. County, with both higher incomes and higher housing costs, but have higher performing schools (e.g. Santa Clara, Contra Costa, and Marin counties).
- Several districts in L.A. County have increased enrollment. They tend to be districts located in affordable areas and/or with high-performing schools.

**Effect on Revenue:**

- Average Daily Attendance (ADA) is projected to fall 3% each of the next three school years in L.A. Unified.
- After expected Cost of Living Adjustments (COLAs) from the state, this attendance decrease will translate to a cumulative decrease of approximately \$174 million over a three-year period in the District's Local Control Funding Formula (LCFF) revenue from 2019-2020 to 2021-2022.
- Though enrollment loss has been ongoing for 15 years, its effect on revenue has often been masked by larger changes in state funding formulas and conditions. Recent years have seen rates restored to a higher level than during the Great Recession. However, annual increases are now less likely to continue masking the effect of enrollment decline on revenue. The effect of enrollment decline on revenue has just begun to be felt. The rate of decline in enrollment due to birth rates is expected to level off within several years, but other causes of decline will remain important.
- In the long run, if enrollment falls faster than per-student rates rise, total LCFF revenue will begin to decline. Other revenue sources may at times compensate for this decline but vary in potential amount and in their degree of dependence on enrollment.

**Recommendations**

The District has very little opportunity to influence the two biggest causes of enrollment decline—a lower birthrate and net out-migration due to the high cost of living in L.A. County. However, families do appear to be willing to move to access high-quality schools, which suggests that improving school quality could retain some families and help cushion the decline.

***To manage enrollment losses and their impact on revenue, the District's strategic options include strategies to mitigate the effect of enrollment decline and strategies to influence the trajectory of the decline. Simply put, these involve working to reduce costs and increase revenue while developing enrollment-share leadership through school quality and niche services:***

- Pursue increased revenue per student through public activism.
- Increase efficiencies to reduce costs without sacrificing educational quality.
- Continue to focus on innovation and school quality improvement in instruction and in the facilities and services that attract students and families.
- Lead in niche segments such as early childhood education and dual language instruction that take advantage of the District's strengths and position.
- Restructure the District to optimize for declining enrollment; the current reimagining initiative provides an opportunity to design the organization to provide support more closely linked to schools and to operate more efficiently than an organization historically organized around larger enrollments.

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>iii</b>
Highlights.....	iii
Recommendations .....	iv
<b>1. INTRODUCTION.....</b>	<b>1</b>
<b>2. RATE AND PATTERN OF THE DECLINE .....</b>	<b>3</b>
<b>3. UNDERSTANDING ENROLLMENT: STOCKS AND FLOWS .....</b>	<b>8</b>
a. Inflow: Birth Rates .....	9
b. Outflow: Migration .....	13
c. Outflow: Graduates.....	14
d. Outflow: Dropouts.....	14
e. A Combined Model of Stocks and Flows.....	15
<b>4. GEOGRAPHICAL EXTENT AND CHARACTER OF THE DECLINE.....</b>	<b>17</b>
a. Migration between Counties.....	17
b. Migration within County .....	19
c. Enrollment Changes between Grade Levels .....	21
d. Enrollment Changes among Local Districts .....	22
<b>5. COST OF THE DECLINE .....</b>	<b>23</b>
<b>6. ASSESSING THE MANAGEABILITY OF DECLINING ENROLLMENT .....</b>	<b>24</b>
a. Conditions of Demand .....	25
b. Exit Barriers .....	26
c. Rivalry Determinants .....	26
<b>7. RECOMMENDATIONS.....</b>	<b>28</b>
a. Strategies to Mitigate the Impact of Enrollment Decline.....	29
b. Strategies to Change the Trajectory of Enrollment Decline .....	30
c. A Hybrid of Strategies: District Reorganization/Reimagining .....	33
<b>8. SUMMARY.....</b>	<b>33</b>
<b>APPENDIX.....</b>	<b>35</b>

## 1. INTRODUCTION

L.A. Unified has experienced substantial enrollment decline. The combined charter and non-charter school District has lost between about 1% and 2% of its students each year since 2003-2004 when enrollment began to fall.<sup>1</sup> Though this rate may seem slow, it means the District area has weathered a **cumulative total decrease of approximately 126,000 students**, about 18%, over this period. This reduction translates to an average annual decline of about 9,000 students, which is equivalent to shrinking by between three and four comprehensive high schools worth of students each year—though of course the decline is distributed across many schools.<sup>2</sup> **The District expects this decline to slow and flatten in the coming years, perhaps followed in the future by a slow rise in enrollment**, but this improvement does not mean the District will gain back the enrollment it has lost.

Although the District receives funds based on *average daily attendance* (ADA)—not enrollment—the two are linked: students cannot attend unless they are first enrolled. When enrollment drops, fewer students are available to attend, thus ADA decreases and revenue decreases follow. Although fewer students require fewer teachers and schools, revenues can fall far more quickly than the fixed costs of personnel and facilities, placing pressure on budgets and requiring strategic responses.

The purpose of this report is to inform Board members about the structural factors that characterize enrollment decline in L.A. Unified and to help District leadership consider strategic alternative management responses that will stabilize District finances and even offer opportunities for enrollment growth at the margins. The central questions addressed by this study are:

- What is the rate and pattern of the decline?
- What are the structural factors driving the decline?
- What is the geographical extent and character of the decline?
- What is the cost of the decline?
- How manageable is the decline?
- What can be done to strategically manage the conditions of the decline?

These questions are discussed in the sections of this report.

Understanding how big the enrollment loss has been and how fast it has occurred, as well as its causes and where it has occurred can help District managers understand what they can do to influence enrollment and what is beyond their sphere of influence. Once these features are understood, decision-makers can estimate the cost of enrollment decline and plan cost savings or reductions that address the problem at the right scale.

---

<sup>1</sup> Combining District-operated schools (including affiliated charters) with independent charter schools

<sup>2</sup> Sources: L.A. Unified Superintendent's Final Budget documents provide enrollment projections, as does the California Department of Education (CDE) through the California Longitudinal Pupil Achievement Data System (CALPADS). Data from these two sources are inconsistent on some indicators. Specific data sources used are noted throughout this report.

### Terminology for Categorizing Schools

Confusion sometimes results from overlaps in the terminology used to describe schools of different types and governance structures. For the purpose of this report, we use the following terminology.

School types include:

- **Regular public schools**, which include all the schools traditionally called public schools, sometimes called traditional or neighborhood schools. It also includes various public schools of choice, pilot schools, magnet schools, and other public-school models *other than* charter schools.
- **Public charter schools** include:
  - **District-affiliated charter schools**, which function within the L.A. Unified Local Education Agency (LEA), are funded through the District, and are managed by the District.
  - **Independent charter schools**, which function either individually or in groups as separate LEAs and receive funding directly from the state. Most independent charter schools within the L.A. Unified area are chartered by L.A. Unified.
- **Private schools**, including parochial schools, are funded through student fees, nonprofit organizations, and other non-public sources.
- **Home schools**, which take place outside of school organizations and are not publicly funded.

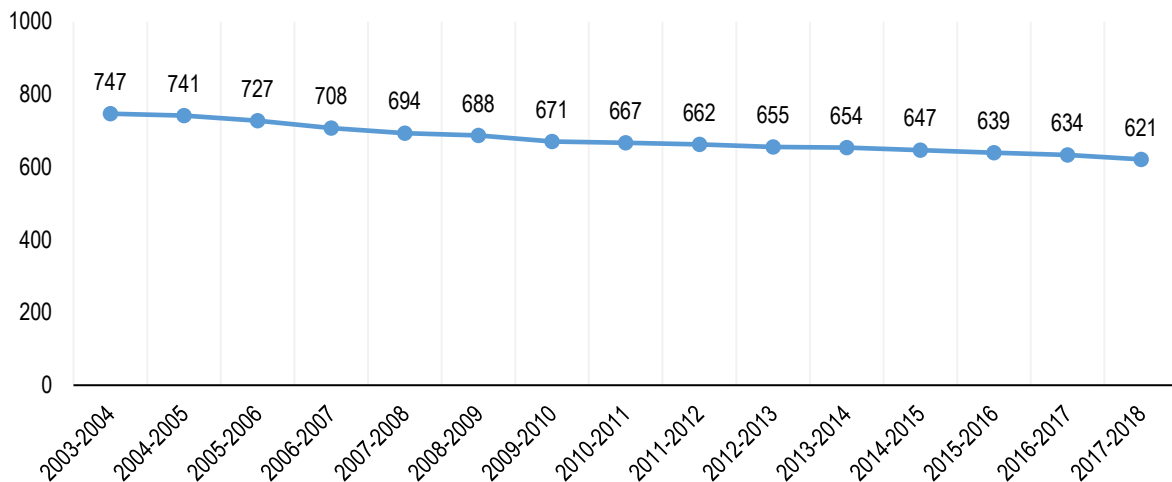
For this analysis, these school types and their data are further grouped as follows.

- **District-operated schools** and statistics for the **combined District**  
These include both 'regular' public schools and *affiliated* charter schools. Thus, they include all public schools within the District boundary area *except independent charter schools* and a small number of county or state operated schools.
- **Public schools**  
This term includes all District-operated schools plus independent charter schools.
- **L.A. Unified boundary area** and statistics for the **L.A. Unified area** or **L.A. Unified region** (interchangeable terms)  
This is the area within Los Angeles County designated as the responsibility of the L.A. Unified School District. Unless specified as limited to public schools within this area, we use this term to encompass the population and all K-12 schooling that takes place within this area, including all types of public schools, private schools, and home schools.

## 2. RATE AND PATTERN OF THE DECLINE

Demand for K-12 schooling has decreased gradually over the last 15 years in the Los Angeles region. After growing by 50,000 students between 1998 and 2003, public schools in the L.A. Unified boundary area peaked at 747,009 students at the close of the 2003-2004 school year, then began to decline by an average of about 9,000 students a year. This steady decrease added up to a large number. Over 15 years (*i.e.*, 14 annual changes from 15 data points), total public school enrollment shrank by 126,000 (Figure 1 & Table 1).

**Figure 1.** Public School Enrollment in the L.A. Unified Boundary Area from 2003-2018



Source: California Department of Education Enrollment Time Series 1996-2018

Note: These data differ slightly from enrollment numbers reported from other sources, including L.A. Unified budgets and school-level enrollment from CDE Data & Statistics. Differences probably relate to differences in when the data were collected.

Table 1 shows this declining enrollment trend in more detail. Note that year-to-year decreases varied from half a percent to more than 2%. Overall the total number of students enrolled in District-operated and charter schools shrank by 18.25% over 14 years and the annualized rate of decline was 1.30%.



**Table 1. Combined District-operated and Independent Charter Enrollment in L.A. Unified from 2003-2018**

School Year	Total Enrollment	# Change	% Change
2003-2004	747,009		
2004-2005	741,367	-5,642	-0.76%
2005-2006	727,319	-14,048	-1.89%
2006-2007	707,626	-19,693	-2.71%
2007-2008	693,680	-13,946	-1.97%
2008-2009	687,534	-6,146	-0.89%
2009-2010	670,745	-16,789	-2.44%
2010-2011	667,251	-3,494	-0.52%
2011-2012	662,140	-5,111	-0.77%
2012-2013	655,494	-6,646	-1.00%
2013-2014	653,826	-1,668	-0.25%
2014-2015	646,683	-7,143	-1.09%
2015-2016	639,337	-7,346	-1.14%
2016-2017	633,621	-5,716	-0.89%
2017-2018	621,414	-12,207	-1.93%
<b>Total</b>		-125,595	-18.25%
<b>Average</b>		-8,971	-1.30%

Source: California Department of Education Enrollment Time Series 1996-2018

### *Types of Providers*

A major feature of the enrollment environment in L.A. Unified is the existence of four different types of school providers as defined in the box on page 2: District-operated schools, including both regular schools and affiliated charter schools, independent charter schools, private schools, and home schools.<sup>3</sup> Enrollment in L.A. Unified-operated schools is the number that directly contributes to the District's revenue.<sup>4</sup> Though L.A. Unified authorizes independent charter schools, takes responsibility for their quality, and receives some compensation for services to them, their enrollment does not count toward District income.

The separation of two types of public-school providers (charter and non-charter) is codified in California's *Education Code* and designed to improve schooling for students by creating an arena for constructive competition.<sup>5</sup> In the same way that racing against a competitor, for example, may increase

<sup>3</sup> The LA County Office of Education (LACOE) is a fourth provider but is relatively small compared to the other four provider-types and thus excluded from this analysis. LACOE manages 36 schools within the county, including 18 charter schools. The majority of non-charter county schools (14) are juvenile court schools. LACOE also manages two specialized high schools and plans to open a third. Source: CDE Dataquest 2017-18 Enrollment for Charter and Non-Charter Schools LACOE District Report; Ed-Data LACOE List of Schools

<sup>4</sup> Independent charter schools chartered by L.A. Unified contribute 1% of their revenue to the District to fund oversight and authorization services, but enrollment in independent charters per se is not linked to state-supplied revenue for L.A. Unified.

<sup>5</sup> The Charter Schools Act of 1992, Cal. Education Code § 47601 states that charter schools are a method to accomplish all of the following: (a) Improve pupil learning; (b) Increase learning opportunities for all pupils, with special emphasis on expanded learning experiences for pupils who are identified as academically low achieving; (c) Encourage the use of different and innovative teaching methods; (d) Create new professional opportunities for teachers, including the opportunity to be responsible for the learning program at the school site; (e) Provide parents and pupils with expanded choices in the types of educational opportunities that are available within the public school system; (f) Hold the schools established under this part accountable for meeting measurable pupil outcomes, and provide the schools with a method to change from rule-based to performance-based accountability systems; (g) Provide vigorous competition within the public school system to stimulate continual improvements in all public schools.

the speed a cyclist will pedal, schools should race against each other to improve instruction and win enrollment.<sup>6</sup> The law provides for charter schools' quality to be assured through the authorization and re-authorization process, while other parts of the Education Code govern how quality is measured at all schools.

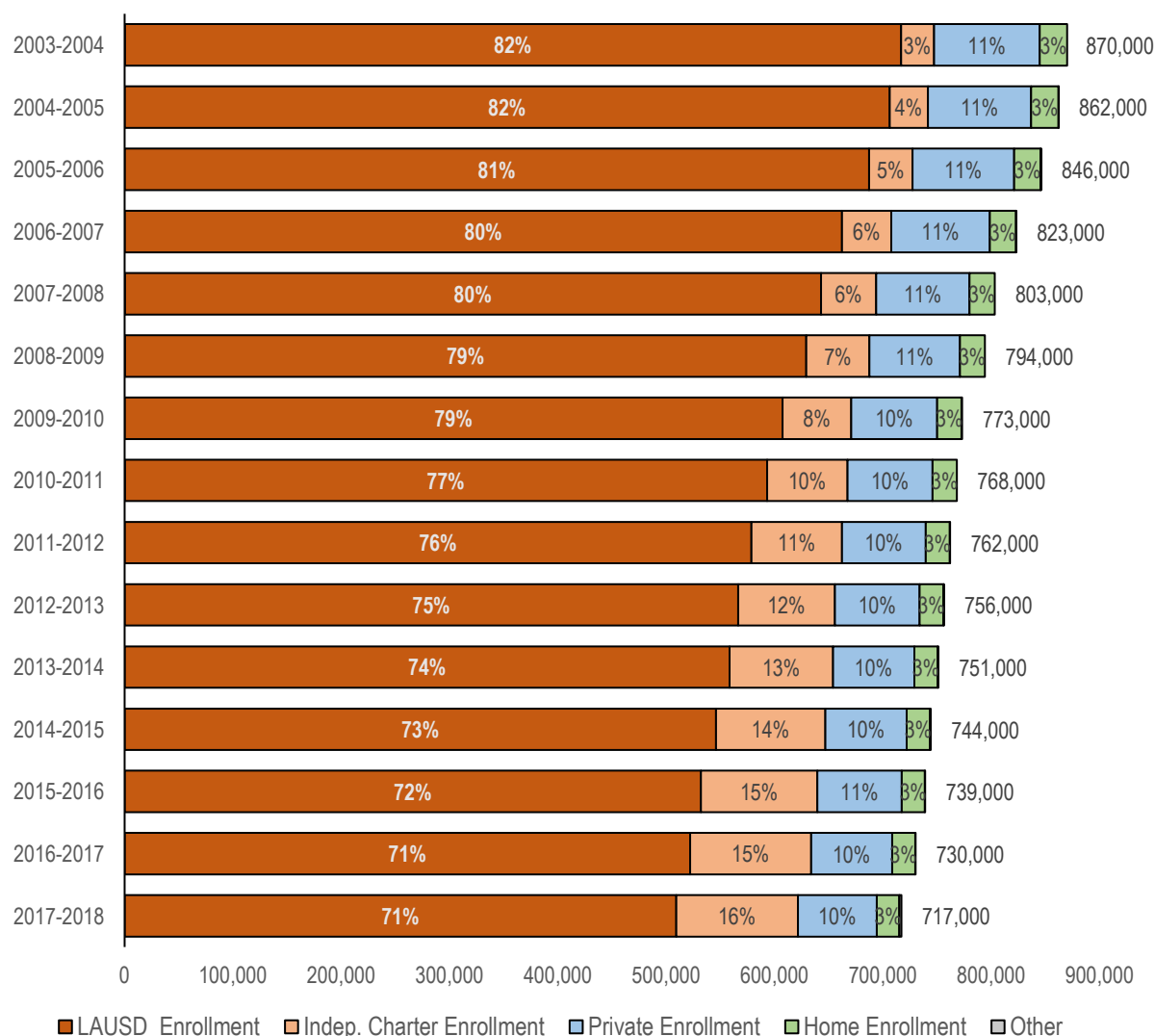
As the overall demand for K-12 schooling in the L.A. region has decreased gradually, the pattern of enrollment across these four types of providers has changed. Figure 2 shows both the overall downturn in demand and the changes in the enrollment share for different providers. The bars representing different years are shorter in each consecutive year to show the decrease in the population of 5 to 17-year-olds in the Los Angeles Unified boundary area from about 870,000 to less than 720,000 over 12 years.<sup>7</sup> The segments of the bars show how the share of students attending District-operated schools decreased eleven percentage points from 2003-2004 to 2017-2018, and the share of students attending independent charter schools grew 13 percentage points over the same period. Private school and home school enrollments remained stable as shares of the total student population.

---

<sup>6</sup> Corbett J, Barwood MJ, Ouzounoglou A, Thelwell R, Dicks M (2012) Influence of Competition on Performance and Pacing during Cycling Exercise. *Med Sci Sports Exerc* 44: 509-515.

<sup>7</sup> U.S. Census Bureau, 2006-2017 American Community Survey 1-Year Estimates, Population Under 18 Years by Age

**Figure 2.** Total Enrollment in L.A. Unified Boundary (2003-2018), with Percentage Enrollment Share by School Provider



Sources: LAUSD District-operated and charter enrollment from California Department of Education 2018, Data Reporting Office, Enrollment by School data files; private school enrollment from California Department of Education 2018, Private School Directory 2017-2018; home school enrollment estimates from National Center for Education Statistics, Fast Facts: Homeschooling

Table 2 provides more details regarding the pattern of enrollment change over time. The columns show enrollment levels and changes for the four types of providers (District-operated, independent charter, private, and home school).

**Table 2. Enrollment and Changes in L.A. Unified Area by School Provider Type (2003-2018) (enrollment in thousands)**

School Year	District Operated Schools			Independent Charter Schools			Private Schools			Home Schools		Total		
	Enrollment	# Change	% Change	Enroll	# Change	% Change	Enroll	# Change	% Change	Enroll	% Change	Enroll	# Change	% Change
2003-04	717			30			98			25		870		
2004-05	706	-11	-2%	35	5	17%	95	-2	-2%	25	-1%	862	-9	-1%
2005-06	687	-19	-3%	40	5	14%	94	-2	-2%	25	-2%	845	-16	-2%
2006-07	662	-25	-4%	45	5	13%	91	-3	-3%	24	-3%	822	-23	-3%
2007-08	643	-19	-3%	51	6	13%	86	-5	-5%	23	-2%	803	-19	-2%
2008-09	629	-14	-2%	58	7	14%	83	-3	-3%	23	-1%	794	-10	-1%
2009-10	607	-22	-3%	63	5	9%	79	-4	-5%	22	-3%	772	-22	-3%
2010-11	593	-14	-2%	74	11	17%	78	-1	-1%	22	-1%	768	-4	-1%
2011-12	578	-15	-3%	84	10	14%	77	-1	-2%	22	-1%	761	-6	-1%
2012-13	566	-12	-2%	89	5	6%	78	1	1%	22	-1%	755	-6	-1%
2013-14	558	-8	-1%	95	6	7%	75	-3	-4%	22	-1%	750	-5	-1%
2014-15	546	-12	-2%	101	6	6%	75	0	0%	22	-1%	744	-6	-1%
2015-16	532	-14	-3%	107	6	6%	78	3	4%	22	-1%	738	-5	-1%
2016-17	522	-10	-2%	112	5	5%	75	-3	-4%	21	-1%	730	-8	-1%
2017-18	509	-13	-2%	112	0	0%	73	-2	-3%	21	-2%	715	-15	-2%
Total		-208	-29%		82	273%		-25	-26%		-16%		-155	-18%
Average		-15	-2%		6	20%		-2	-2%		-1%		-11	-1%

Sources: LAUSD District-operated and charter enrollment from California Department of Education 2018, Dataquest Enrollment Reports; private school enrollment from California Department of Education 2018, Private School Directory 2017-2018.

Note: Summary average percentages in the final row represent annualized percent change.

A notable pattern shown in Table 2 is that the only school provider with positive change in enrollment in all years is the independent charter school sector. All other sectors experienced declining enrollment in the majority of observed years. Another observation to make from this table is that independent charter-school enrollment growth never matched District-operated enrollment loss: District-operated schools have consistently lost more than charter schools have gained. Therefore, students did not simply shift between sectors; many left the District entirely.

The share of enrollment decline due to different factors can be quantified. Note that the total number of students combined in District-operated schools and independent charter schools in 2017-2018 equaled about 621,000, which is lower than the total enrollment of *only* District-operated schools in 2003-2004—about 717,000. This comparison shows that District enrollment would have declined in this period even if independent charter schools and their students did not exist. **If all independent charter school students had attended District-operated schools, for a combined total of 747,000 in 2003-2004 and 621,000 in 2017-2018, District-operated schools would still have lost about 126,000 students or 17%.** In other words, no more than about 40% of the District's lost enrollment can be attributed to independent charter schools, while at least 60% of that lost enrollment must be attributed to other factors.

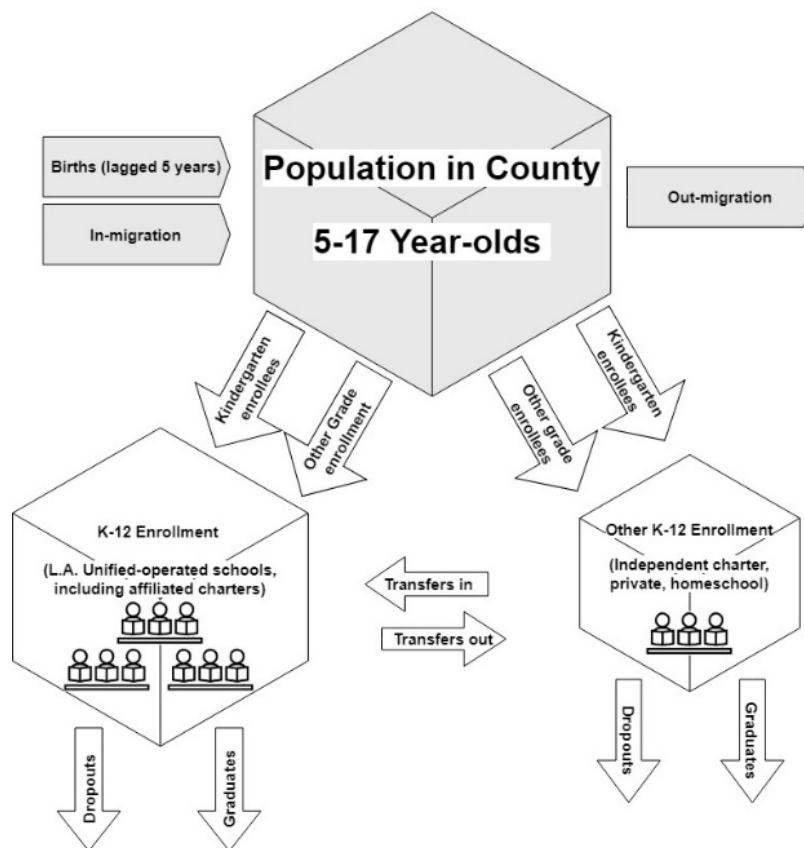
Thus, while independent charter schools have grown as District-operated schools have declined, **the largest share of the District's decline cannot be attributed simply to charter growth.** These observations point to birthrates and migration as major drivers of enrollment decline, as described in the next section.

### 3. UNDERSTANDING ENROLLMENT: STOCKS AND FLOWS

To understand how birthrates and migration, as well as the movement of students between types of schools affects enrollment, it helps to think of enrollment as an accumulation—or *stock*—that is the result of both incoming and outgoing *flows* of students.

Figure 3 illustrates this concept in general. Shown at the top is the *population stock* of all children aged 5 to 17 (give or take a year or two on either end) who live in the attendance area and constitute the potential pool of for K-12 students. These children flow into the stock either because they were born here or moved in at some point during their childhood. When they left the area, they flowed out of the stock of possible enrollees.

**Figure 3.** Population and Enrollment Stocks and Flows



From this *population stock* of school-aged children, the *enrollment stock* contains students who have either enrolled in an L.A. Unified-operated kindergarten or moved to a District-operated school after kindergarten from any school outside the District or from a private, independent charter, or home school within the District.

Outflows from the District enrollment stock take one of four forms. By the end of each year, students flow out of the enrollment stock if they 1) drop out, 2) graduate, or 3) transfer out. If they 4) move away, they flow out of the enrollment stock indirectly by first flowing out of the population stock.

The rates and patterns of these three inflows and four outflows provide a comprehensive picture of the enrollment decline L.A. Unified faces.

### **a. Inflow: Birth Rates**

The starting point is to consider the birthrate in the L.A. Unified region. Except for in-migration, the children born here today are the potential kindergarteners of five years in the future.

To predict how many children can potentially enter kindergarten in L.A. Unified schools, we *lag* the county birthrate five years and then multiply it by the percent of those children who are accounted for in enrollment data corresponding to the L.A. Unified attendance boundary each year. Over the last 15 years, kindergarten enrollment in the District area has varied between 41% and 51% as a percentage of lagged births in the entire county. On average about four and a half out of every 10 children born in L.A. County attend school somewhere in the L.A. Unified boundary.<sup>8</sup>

In L.A. County, fewer children have been born each year than the year prior for most of the last 15 years (Table 3, excluding gray rows estimated for 2018-2021). The result has been a 6,000-child decrease in estimated lagged births in the L.A. District area, which is an 8.6% cumulative decline.<sup>9</sup> The annualized rate of decline during this time was six-tenths of a percent; however, the annual change was volatile. In 2013-2014 the lagged birth rate climbed by 3.1%, but in 2015-2016 it fell by 1.5% followed by approximately 3% drops in 2016-2017 and 2017-2018.

---

<sup>8</sup> Determining the birthrate for the L.A. Unified attendance area requires estimating based on the county birthrate, since live births are recorded by county, not LEA. Taking total kindergarten enrollment, which includes charter schools, private schools, and home schools for the L.A. Unified attendance area produces an estimate of the 5-year lagged L.A. County births within the District's attendance boundaries for each year.

<sup>9</sup> Table 3 and Figure 3 extend this period with three years of projections (gray rows), after which the decline is expected to be 18%, with 12,000 fewer births in total.

**Table 3. L.A. County and L.A. Unified Boundary Area Estimated Births and Birthrate Change, 2003-2021**

School Year	Births in County Lagged 5 Years	Est. Births in District Lagged 5 Years	# Change	% Change
2003-2004	158,604	70,000		
2004-2005	156,153	69,000	-1,000	-1.43%
2005-2006	157,391	68,000	-1,000	-1.45%
2006-2007	153,523	65,000	-3,000	-4.41%
2007-2008	151,167	63,000	-2,000	-3.08%
2008-2009	152,192	63,000	0	0.00%
2009-2010	151,504	63,000	0	0.00%
2010-2011	150,377	63,000	0	0.00%
2011-2012	151,837	64,000	1,000	1.59%
2012-2013	151,813	65,000	1,000	1.56%
2013-2014	147,684	67,000	2,000	3.08%
2014-2015	139,679	67,000	0	0.00%
2015-2016	133,160	68,000	1,000	1.49%
2016-2017	130,312	66,000	-2,000	-2.94%
2017-2018	131,697	64,000	-2,000	-3.03%
2018-2019	128,523	63,000	-1,000	-1.56%
2019-2020	130,150	61,000	-2,000	-3.17%
2020-2021	124,438	58,000	-3,000	-4.92%
<b>Total</b>	2,600,204	1,167,000	-12,000	-17.14%
<b>Average</b>			-706	-1.01%

Source: L.A. Superintendent's Final Budget 2012-13 and 2018-19

Note: All numbers after 2017-2018 estimated.

**Table 4.** Combined L.A. Unified Estimated Kindergarten Enrollment and Enrollment Change, 2003-2021

School Year	District Operated			Independent Charter			Combined		
	Kindergarten Enrollment	# Change	% Change	Kindergarten Enrollment	# Change	% Change	Kindergarten Enrollment	# Change	% Change
2003-04	53,634			1,717			55,351		
2004-05	53,175	-459	-0.86%	2,059	342	19.92%	55,234	-117	-0.21%
2005-06	52,105	-1,070	-2.01%	2,357	298	14.47%	54,462	-772	-1.40%
2006-07	49,896	-2,209	-4.24%	2,556	199	8.44%	52,452	-2,010	-3.69%
2007-08	48,067	-1,829	-3.67%	2,755	199	7.79%	50,822	-1,630	-3.11%
2008-09	47,781	-286	-0.60%	3,096	341	12.38%	50,877	55	0.11%
2009-10	47,594	-187	-0.39%	3,599	503	16.25%	51,193	316	0.62%
2010-11	46,934	-660	-1.39%	4,704	1,105	30.70%	51,638	445	0.87%
2011-12	47,677	743	1.58%	5,169	465	9.89%	52,846	1,208	2.34%
2012-13	47,830	153	0.32%	5,432	263	5.09%	53,262	416	0.79%
2013-14	49,168	1,338	2.80%	6,147	715	13.16%	55,315	2,053	3.85%
2014-15	49,236	68	0.14%	6,368	221	3.60%	55,604	289	0.52%
2015-16	49,289	53	0.11%	7,131	763	11.98%	56,420	816	1.47%
2016-17	48,255	-1,034	-2.10%	7,344	213	2.99%	55,599	-821	-1.46%
2017-18	45,903	-2,352	-4.87%	7,509	165	2.25%	53,412	-2,187	-3.93%
2018-19	44,895	-1,008	-2.20%	7,670	161	2.14%	52,565	-847	-1.59%
2019-20	43,396	-1,499	-3.34%	7,774	104	1.36%	51,170	-1,395	-2.65%
2020-21	40,458	-2,938	-6.77%	7,694	-80	-1.03%	48,152	-3,018	-5.90%
<b>Total</b>	865,293	-13,176	-24.57%	91,081	5,977	348.11%	956,374	-7,199	-13.01%
<b>Average</b>		-775	-1.44%		352	20.50%		-423	-0.76%

Source: L.A. Superintendent's Final Budget 2012-13 and 2018-19

Note: All numbers after 2017-2018 estimated.

Birth rates have fallen more precipitously than overall public kindergarten enrollment, which dropped in 2007-2008 but not again until 2016-2017. In total, in the 15-year period between 2003-2004 and 2017-2018, combined kindergarten enrollment (District-operated and independent charter) fell by 3.9% percent. Over this period, district-operated kindergarten dropped at an annualized rate of 1% (552 students per year), and independent charter kindergarten grew from a very small start at an annualized rate of 24% (414 students per year). However, the number of births in 2015 fell almost 6,000 in the County and 3,000 in the District, which leads to the prediction that kindergarten enrollment for both District-operated and independent charter kindergarten will drop sharply in 2020-2021.

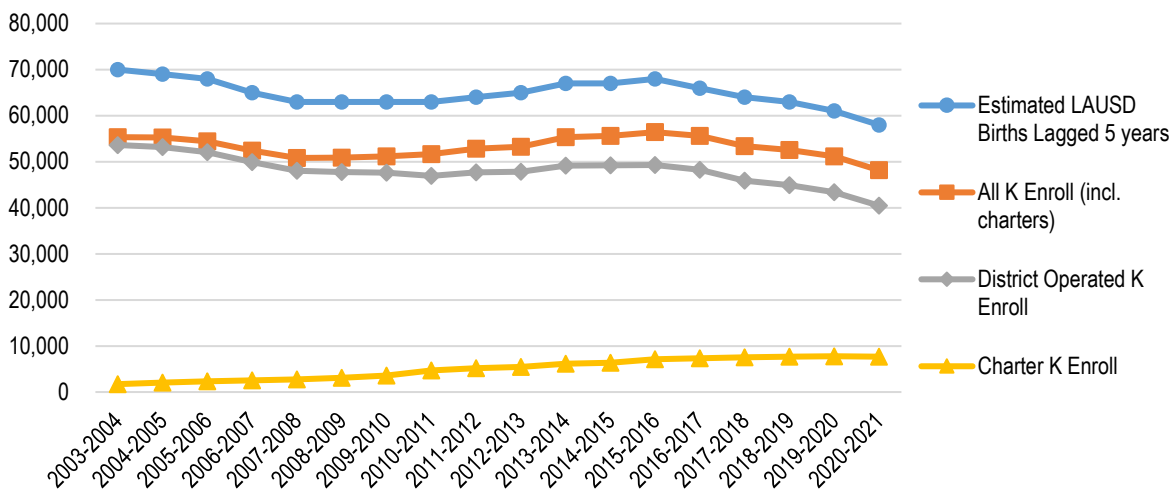
As shown in Table 3, by 2020-2021 the lagged births count is expected to have decreased a total of 17% (-12,000) from what it was in 2003-2004, and combined District-operated and independent charter kindergarten enrollment is expected to fall by only 13% (-7,200) in this time.

Despite falling birthrates, L.A. Unified kindergarten is shrinking more slowly than other grade levels. The combined District-operated and independent charter District had 6,000 fewer births, but only 2,756 fewer kindergartners in total over the last 15 years. In 2003-2004, the combined L.A. Unified was enrolling 79% of the possible students available in the population pool, and now appears to be enrolling slightly more: 83%, which is modest progress in a positive direction. Some of this growth may be attributable to the Transitional Kindergarten (TK) and Extended Transitional Kindergarten (ETK) programs, expanding the potential pool to include 4-year-olds. However, if the birthrate continues to drop, we will expect kindergarten enrollment to continue falling.



In total, in the 18-year period shown in Table 4, District-operated kindergarten may fall by as much as 13,000 (25%) and charter kindergarten may rise as much as 6,000 (348%). Figure 4 displays this trend in detail, showing charter kindergarten and District-operated kindergarten as separate trend lines. As in Table 4, the last three years are projected.

**Figure 4.** L.A. Unified's Enrollment Area Births, Lagged 5 Years, 2003-2021



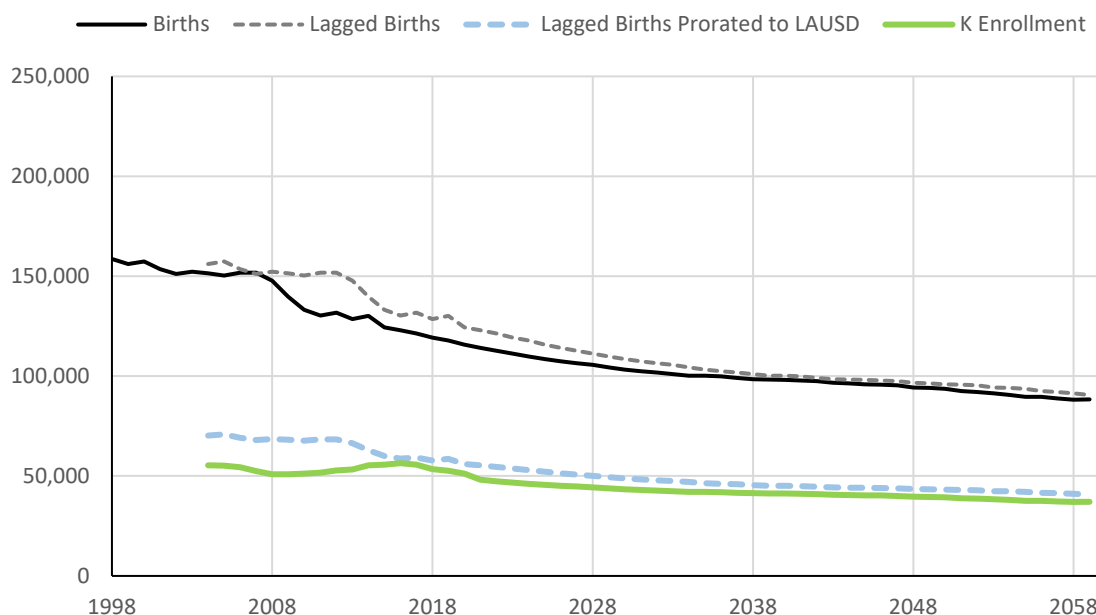
Source: L.A. Unified Superintendent's Final Budget 2012-2013, and 2018-2019

Note: Years after 2017-2018 estimated

Disaggregating independent charter schools from District-operated schools provides another perspective: the difference between birth trends and kindergarten enrollment is evident when these two school providers are separated. The gap between the gray line marked with diamonds and the orange line marked with squares represents the portion of the public school kindergarten market that independent charter schools serve. To help visualize this gap, its size is reproduced separately in the yellow line with triangles at the bottom of the graph. Although this gap, representing independent charters, has grown over the last 15 years, it appears to have stabilized. However, projections indicate that District-operated schools will continue declining in enrollment as county births decline, experiencing the brunt of population decline.

Since the estimated birth rate shown in Figure 4 appears to be on a sharp downward trajectory, it is worth asking whether that trajectory is expected to continue downward or level off. Figure 5 shows the lagged birth rate and the L.A. Unified area portion of that birth rate for a sixty-year period, with years after 2018 estimated by the California Department of Finance.

**Figure 5: Births in Los Angeles County with L.A. Unified Combined Kindergarten Enrollment**



Source: L.A. Unified Superintendent's Final Budget 2012-2013, and 2018-2019 and Projections Prepared by Demographic Research Unit, California Department of Finance, January 2018

Note: Years after 2018 estimated; combined enrollment includes independent charter schools.

This graph shows that the steepest declines occurred during the past 20 years. Although these downward slopes are projected to continue for the next three years or so, they are expected to flatten over the next 40 years. Thus, although the District faces a declining enrollment environment, especially for the next three or so years, the portion of decline due to birth rates has begun to level off and will remain relatively flat in coming years. **The largest single driver of the enrollment decline experienced by the District will diminish in importance.** The future of District enrollment will be largely determined by other factors.

## b. Outflow: Migration

The other flow into and out of the District's pool of potential enrollees is migration. Using yearly census estimates of the population of 5 to 17-year-olds, the IAU found that net migration of children in the L.A. Unified area was negative over the last 15 years: Even though some children moved in, more must have moved away.<sup>10</sup> The population of schoolchildren fell by 155,000, which was a 19% overall decline, at an annualized rate of about 1.26% or 11,000 on average each year in the last 15 years (Table 5). The geographical pattern of this migration is the topic of a later section in this report.

<sup>10</sup> Students transfer into the District at various grade levels. Although cohorts generally decrease in size as they matriculate through the grade levels, the cohort that began in 2003-04 and graduated in 2015-16, for example, grew by 260 students between 6<sup>th</sup> and 7<sup>th</sup> grade. For comparison, the cohort that began in 2005-06 and graduated in 2017-18 grew by 630 students between 6<sup>th</sup> and 7<sup>th</sup> grade. The 2016-17 cohort showed no such net growth.

**Table 5.** Change in Estimated Population of 5 to 17-Year-olds in L.A. Unified's Enrollment Area, 2003-2018

School Year	Est. Population of 5-17-Year-olds in LA Unified Area	# Change	% Change
2003-2004	870,000		
2004-2005	862,000	-8,000	-0.92%
2005-2006	846,000	-16,000	-1.86%
2006-2007	823,000	-23,000	-2.72%
2007-2008	803,000	-20,000	-2.43%
2008-2009	794,000	-9,000	-1.12%
2009-2010	773,000	-21,000	-2.64%
2010-2011	768,000	-5,000	-0.65%
2011-2012	762,000	-6,000	-0.78%
2012-2013	756,000	-6,000	-0.79%
2013-2014	751,000	-5,000	-0.66%
2014-2015	744,000	-7,000	-0.93%
2015-2016	739,000	-5,000	-0.67%
2016-2017	730,000	-9,000	-1.22%
2017-2018	715,000	-15,000	-2.05%
<b>Total</b>		-155,000	-17.82%
<b>Average</b>		-11,000	-1.26%

Source: U.S. Census Bureau, American Community Survey (ACS), 1-Year Estimates 2006-2018; LAUSD enrollment from California Department of Education 2018, Dataquest Enrollment Reports; private school enrollment from California Department of Education 2018, Private School Directory 2017-2018.

### c. Outflow: Graduates

Graduation is intentional, desirable outflow. Mathematically, it would negatively affect enrollment only if more students graduate than enter kindergarten or transfer into the District at other grade levels, or in other words, if the graduating cohort is larger than the kindergarten cohort plus net transfers in. Over the last 15 years, the combined L.A. Unified has graduated an average of 34,000 students (28,000 from District-operated and 6,000 from independent charter schools) and enrolled an average of 53,000 kindergarteners (48,000 in District-operated and 5,000 in independent charters) every year. Therefore, the District has still graduated about 20,000 fewer students on average than it has brought in through kindergarten and net transfer enrollment.<sup>11</sup>

### d. Outflow: Dropouts

Of the students who do not make it from kindergarten to graduation in L.A. Unified, some move away to attend school elsewhere, but many are dropouts. A dropout is an individual who was enrolled in any grade level 7 through 12 during the prior school year but left before completing the year and has not returned to school or did not begin attending the next grade in the school they were expected to attend.<sup>12</sup> Dropout is a form of enrollment loss that, unlike out-migration or transfer to another school type, is not recovered in other parts of the county or state.

<sup>11</sup> CDE Data Reporting Office – Dataquest Graduate Report (includes Independent Charters)

<sup>12</sup> California Department of Education (2018)

Table 6 shows District-operated L.A. Unified dropouts for grades 7 through 12 since 2003-2004. During that time, District-operated schools lost 166,000 students to dropout, an average of almost 13,000 a year. In recent years, however, the District has made marked progress in retaining dropouts; the number of dropouts has fallen by almost three-quarters from its high in 2008-2009.

**Table 6.** Dropouts Grades 7 to 12 in L.A. Unified District-operated Schools vs. L.A. County, 2003-2017<sup>13</sup>

Year	District-Operated Schools		LA County		District-County Ratio
	Dropouts	# Change	Dropouts	# Change	
2003-2004	17,752		27,316		65%
2004-2005	12,942	-4,810	23,491	-3,825	55%
2005-2006	11,193	-1,749	24,576	1,085	46%
2006-2007	16,384	5,191	26,794	2,218	61%
2007-2008	13,858	-2,526	23,338	-3,456	59%
2008-2009	18,030	4,172	32,428	9,090	56%
2009-2010	13,013	-5,017	20,553	-11,875	63%
2010-2011	11,882	-1,131	27,044	6,491	44%
2011-2012	11,768	-114	27,192	148	43%
2012-2013	12,241	473	25,543	-1,649	48%
2013-2014	7,468	-4,773	17,667	-7,876	42%
2014-2015	8,272	804	18,274	607	45%
2015-2016	6,197	-2,075	16,819	-1,455	37%
2016-2017	4,957	-1,240	15,702	-1,117	32%
Average		-984		-893	51%

Source: CDE Data Reporting Office –dropouts by race, gender, and school data files

Note: Annual dropout counts are adjusted for re-enrollment; percent change columns in final row represent annualized percent change.

Another way to view the rate and pattern of dropouts in L.A. Unified is to compare it to the county. Although the District makes up just 42% of the overall county K-12 enrollment, it produced, on average, 51% of the county's dropouts over 15 years. However, this District-County dropout ratio too has improved, decreasing from a high of 65% to just 32% in 2016-2017.

## e. A Combined Model of Stocks and Flows

Quantifying four of the flows into and out of the public-school enrollment stock explains the overall change in public-school enrollment over the last 15 years. As shown in Table 7, total enrollment in any given year should be the net of the previous year's enrollment minus the graduates (G), the dropouts (D), and those who migrate away from the District (M), plus the newly enrolled kindergarteners (K).

<sup>13</sup> The IAU also disaggregated L.A. Unified schools from charters and found that for the past three years of CDE dropout data (FY1415 to FY1617), L.A. Unified schools make up 66% of the schools that enroll grades 7-12 but 92% of the dropouts. Charters make up 34% of the schools that enroll grades 7-12 but 8% of the total dropouts. Another way to look at these numbers is that in 2016-2017, L.A. Unified schools had a dropout rate of approximately 0.9 students out of every 100 and charters had a dropout rate of approximately 0.4 out of every 100 students. See Appendix for more details.

**Table 7. Combined District-operated and Independent Charter School Flows and Enrollment in L.A. Unified, 2008-2018**

School Year	Prior Year Enrollment (PE)	Prior Year Graduates (G)	Prior Year Dropouts (D)	Estimated Net Migration (M)	LAUSD Kindergarten Enrollment from CDE (K)	Total Expected Enrollment (TEE = PE - G - D - M + K)	Total Actual Enrollment (TAE)	Difference between Total Expected and Actual Enrollment (TAE-TEE)	Percent Difference ((TAE-TEE)/TAE)
2003-2004	746,852	-27,795	-18,427	-4,000	55,444	752,074	747,009	5,065	-0.7%
2004-2005	747,009	-29,085	-18,452	-8,000	55,099	746,571	741,367	5,204	-0.7%
2005-2006	741,367	-29,744	-13,648	-16,000	54,502	736,477	727,319	9,158	-1.3%
2006-2007	727,319	-28,440	-11,665	-23,000	53,511	717,725	707,626	10,099	-1.4%
2007-2008	707,626	-28,372	-17,435	-20,000	51,775	693,594	693,680	-86	0.0%
2008-2009	693,680	-31,032	-14,711	-9,000	52,099	691,036	687,534	3,502	-0.5%
2009-2010	687,534	-32,147	-18,776	-21,000	57,292	672,903	670,745	2,158	-0.3%
2010-2011	670,745	-35,303	-14,188	-5,000	52,954	669,208	667,251	1,957	-0.3%
2011-2012	667,251	-35,973	-13,304	-6,000	57,344	669,318	662,140	7,178	-1.1%
2012-2013	662,140	-37,387	-13,140	-6,000	54,946	660,559	655,494	5,065	-0.8%
2013-2014	655,494	-37,304	-13,582	-5,000	56,953	656,561	653,826	2,735	-0.4%
2014-2015	653,826	-37,920	-8,132	-7,000	57,072	657,846	646,683	11,163	-1.7%
2015-2016	646,683	-37,229	-8,824	-5,000	60,408	656,038	639,337	16,701	-2.6%
2016-2017	639,337	-37,701	-6,715	-9,000	63,552	649,473	633,621	15,852	-2.5%
2017-2018	633,621	-37,212	-5,519	-15,000	61,434	637,324	621,414	15,910	-2.6%

Sources: L.A Unified kindergarten enrollment from CDE Data Reporting Office – Dataquest Enrollment Multi-Year Summary by Grade; Estimated net migration from U.S. Census Bureau, American Community Survey (ACS), 1-Year Estimates 2006-2018; dropouts from CDE Data Reporting Office – Dataquest Dropouts by Grade Report; graduation from CDE Data Reporting Office – Dataquest Graduate Report (includes Independent Charters); actual change from CDE Data Reporting Office – Dataquest Time Series Public School Enrollment.

Note: The difference between expected and actual for most years is within the margin of error for the migration estimates used.

This model can be checked against the actual enrollment: a comparison of Total Expected Enrollment (TEE) to Total Actual Enrollment (TAE) in Table 7 shows that the model is close to what actually happens.<sup>14</sup>

Table 7 shows that it is possible to explain most enrollment change in the combined District using a stock-and-flow model that takes into consideration 1) change from past enrollment, 2) graduates, 3) dropouts, 4) net migration, and, 5) new kindergarten enrollees. However, the numbers attached to many of these flows are estimated and imprecise. The main value of this model is that it shows the magnitude of dropouts and out-migration as large contributors to enrollment decline for the District including independent charters. The underlying forces that drive out-migration are discussed in the next section.

<sup>14</sup> For example, in 2007-2008, the enrollment stock began with 707,000 potential enrollees from the previous year. Of course, some of these students graduated (28,000) and some dropped out (12,000), reducing the pool of potential re-enrollees. In addition, the number of school-aged residents of the District declined by 20,000, further shrinking the possible pool of returnees. However, the District received an inflow of about 52,000 children who enrolled in kindergarten. Added together, these numbers suggest that the entire enrollment stock should be about 694,000. In fact, the recorded enrollment was almost exactly that—just 86 more than expected.

#### 4. GEOGRAPHICAL EXTENT AND CHARACTER OF THE DECLINE

Though declining enrollment is widespread across districts in California, it is not universal. A comparison of enrollment between the combined District, L.A. County, and the state (Table 8) shows that the District's enrollment decline has been greater as a percentage of its total enrollment (-16.81%) than either the county (-1.03%) or the state (-1.24%). Although many students who leave L.A. Unified are likely to go to other districts in the county and state, the District is losing a greater share of its students on average than other districts.

**Table 8.** Change in Number of Enrolled Students in L.A. Unified, L.A. County, and California, 2003-2018

Year	Combined L.A. Unified			L.A. County			California		
	# Enrolled	# Change	% Change	# Enrolled	# Change	% Change	# Enrolled	# Change	% Change
2003-2004	747,009	-		1,743,000	-		6,299,000	-	
2004-2005	741,367	-5,642	-0.76%	1,734,000	-9,000	-0.52%	6,322,000	23,000	0.37%
2005-2006	727,319	-14,048	-1.89%	1,708,000	-26,000	-1.50%	6,312,000	-10,000	-0.16%
2006-2007	707,626	-19,693	-2.71%	1,673,000	-35,000	-2.05%	6,287,000	-25,000	-0.40%
2007-2008	693,680	-13,946	-1.97%	1,648,000	-25,000	-1.49%	6,275,000	-11,000	-0.19%
2008-2009	687,534	-6,146	-0.89%	1,632,000	-16,000	-0.97%	6,252,000	-23,000	-0.37%
2009-2010	670,745	-16,789	-2.44%	1,574,000	-58,000	-3.55%	6,192,000	-60,000	-0.96%
2010-2011	667,251	-3,494	-0.52%	1,589,000	15,000	0.95%	6,217,000	25,000	0.40%
2011-2012	662,140	-5,111	-0.77%	1,578,000	-11,000	-0.69%	6,221,000	4,000	0.06%
2012-2013	655,494	-6,646	-1.00%	1,564,000	-14,000	-0.89%	6,227,000	6,000	0.10%
2013-2014	653,826	-1,668	-0.25%	1,553,000	-12,000	-0.70%	6,237,000	10,000	0.16%
2014-2015	646,683	-7,143	-1.09%	1,539,000	-13,000	-0.90%	6,236,000	-1,000	-0.02%
2015-2016	639,337	-7,346	-1.14%	1,523,000	-16,000	-1.04%	6,227,000	-9,000	-0.14%
2016-2017	633,621	-5,716	-0.89%	1,511,000	-12,000	-0.79%	6,228,000	1,000	0.02%
2017-2018	621,414	-12,207	-1.93%	1,493,000	-19,000	-1.19%	6,220,000	-8,000	-0.13%
<b>Total</b>		-125,595	-16.81%		-251,000	-14.40%		-78,000	-1.24%
<b>Average</b>		-8,971	-1.20%		-17,929	-1.03%		-5,571	-0.09%

Source: California Department of Education Data Reporting Office – Enrollment by School 2003-2018

##### a. Migration between Counties

Though the state of California overall has lost about 78,000 students in the last 15 years, only a little more than half (31 of 58) of the counties in the state saw a decrease in enrollment. For insight into enrollment differences between counties and regions of the state, the IAU identified 10 counties with the largest net enrollment change over this period: the five that gained the most enrollment and the five that lost the most, as listed in Table 9. Four of the five counties with the biggest enrollment *decreases* are in Southern California. (They are L.A. County and three neighbors: Orange, Ventura, and San Bernardino). Of the five counties with the largest enrollment *increases* in the state, two are in Southern California: Riverside and Kern. These data suggest that the statewide enrollment drop is substantially localized to Southern California and that families may be moving out of L.A. County to nearby counties in the region. For a list of all counties within California and their corresponding enrollment changes, see the Appendix.

Enrollment change due to migration may be related to affordability. Table 9 shows these 10 counties along with data about affordability. One way to evaluate affordability of living in a given community is to compare median income to the cost of housing, which can be expressed either as housing value or as rent,

both shown in the table. Another way to estimate affordability is to compare median income to the living wage required to pay for necessities; this measure is also shown in the table.

**Table 9. California Counties with the Greatest Enrollment Change from 2003 to 2018**

County	Enrollment Change 2003-2018	% Enrollment Change	Median Housing Value 2018	Median Household Income 2018	Median Gross Rent 2018	Hourly Living Wage 2018	Living Wage to Income (a)	Housing Value to Income (b)	Rent to Income (c)
Los Angeles ↓	-250,221	-14%	\$465,000	\$57,952	\$1,264	\$19	0.66	8.0	26%
Solano ↓	-8,256	-12%	\$305,900	\$69,227	\$1,337	\$18	0.52	4.4	23%
Orange ↓	-29,629	-6%	\$584,200	\$78,145	\$1,608	\$20	0.51	7.5	25%
Ventura ↓	-7,558	-5%	\$481,400	\$78,593	\$1,572	\$20	0.51	6.1	24%
San Bernardino ↓	-15,947	-4%	\$256,000	\$54,469	\$1,144	\$18	0.66	4.7	25%
Santa Clara ↑	20,934	8%	\$752,400	\$101,173	\$1,813	\$21	0.42	7.4	22%
San Joaquin ↑	17,179	13%	\$246,900	\$55,045	\$1,057	\$17	0.62	4.5	23%
Tulare ↑	3,819	15%	\$169,600	\$42,789	\$847	\$17	0.80	4.0	24%
Riverside ↑	64,135	18%	\$276,300	\$57,972	\$1,212	\$18	0.62	4.8	25%
Kern ↑	29,792	19%	\$175,600	\$49,788	\$905	\$17	0.68	3.5	22%

Source: For enrollment change: California Department of Education Enrollment by School, 2003-2018; for median housing value (median value of owner-occupied housing units 2012-2016), median household income, median gross rent: U.S. Census Bureau, American Community Survey (ACS), 5-Year Estimates. For hourly living wage: Living Wage Calculator ([livingwage.mit.edu](http://livingwage.mit.edu)), two-parent, two-child households.

Median income ranges from about \$50,000 in Kern County to about \$101,000 in Santa Clara County, with Los Angeles County ranking sixth at \$58,000.

The hourly living wage is how much money two-parent households with two children would have to make to pay for necessities. Converted to an annual wage and shown as a ratio to median income in column (a), this provides a way to look at the relative cost of living. Higher numbers mean higher costs relative to wages. The lowest number shown is affluent Santa Clara County at 0.42. The highest is Tulare County at 0.80; it has the lowest median income of these counties, while it also has the lowest population and therefore may be the most sensitive to random changes. Los Angeles County is among the highest on this measure at 0.66. In other words, two thirds of the median income is required to pay for necessities for a typical family.

The housing value to income metric in column (b) indicates how many years of a typical worker's earned annual income would buy a house—the lower this number, the more affordable housing is for *owners*. This ranges from 3.5 in Kern County to 8.0 in Los Angeles County.

The annual rent to income metric in column (c) indicates what portion of a typical worker's income would be required to rent a home—the lower this number, the more affordable housing is for *renters*. This ranges from 21.5% in Santa Clara County to 26.2% in Los Angeles County.

The complexities of relating rents to home values to incomes are beyond the scope of this paper.<sup>15</sup> However, Los Angeles County ranks as the least affordable county of these ten counties on scales (b) and (c) and is in the four least affordable of the ten counties on scale (a). At the same time, it has experienced the greatest enrollment loss of all California counties as a percent of enrollment. This analysis suggests

<sup>15</sup> This preliminary analysis cannot be causal for several reasons, including the fact that it does not account for a time relationship between affordability and enrollment change. The affordability statistics come from the end of the period shown, not the beginning. Nevertheless, there is enough here to hypothesize a relationship, which could be tested by using statistics for all years for all counties, conducting more sophisticated statistical analysis, and considering other factors.

that relative affordability may draw students, or more likely, relative lack of affordability may drive families with students away. Indeed, research suggests socioeconomic factors influence family migration and school enrollment.<sup>16</sup>

Furthermore, California's coastal metro areas, including Los Angeles, have added few low-income households in recent years, whereas the comparably less costly inland counties, including in the Riverside-San Bernardino area, have added thousands. Approximately four out of 10 low-income households that moved inland moved from coastal areas.<sup>17</sup> Without considerable investments in housing development – specifically low-income housing in Los Angeles County – this out-migration trend will likely continue.

Several counties, however, do not fit this pattern. Santa Clara County, in Silicon Valley, has high income, but also high home values, and the ratio between the two is only 13%, which suggests factors other than affordability can draw families to a district. On the other end of the spectrum, Solano County is relatively affordable, yet has lost enrollment, which suggests factors other than expense can be associated with declining enrollment. One hypothesis is that quality can attract enrollment under certain conditions. In Solano County only 43% of the students met or exceeded standards on the CAASPP English Language Arts test, whereas in Santa Clara County, which has been gaining enrollment in the context of high incomes and high housing values, 62% achieved at this level.<sup>18</sup> It is probably also relevant that Santa Clara County's high incomes are based on a high-technology economy, in contrast to rural counties with lower incomes. Further analysis would be required to understand how these factors apply to an *urban* county with moderately low incomes.

## **b. Migration within County**

Most school districts in L.A. County have experienced declining enrollment over the past 15 years, including L.A. Unified. However, 19 districts in the county gained students during this time. Those districts that increased their enrollment numbers are shown in Table 10 (see Appendix for full list). While none of the districts compare in size to L.A. Unified, there are several on the list with enrollments over 10,000 as well as several with comparable English learner percentages to L.A. Unified (approximately 23% of students).

---

<sup>16</sup> Kotkin, J., Cox, W., Schill, M., & Modarres, A. (2015). Building Cities for People. *Chapman University Center for Demographics and Policy*. Retrieved from <http://www.newgeography.com/files/Cities-for-People-web.pdf>.

<sup>17</sup> Uhler, B. (2015). Lower-Income Households Moving to Inland California from Coast. *LAO*. Retrieved from <https://lao.ca.gov/LAOEconTax/Article/Detail/133>

<sup>18</sup> Countywide, L.A. County students' rate meeting or exceeding standards on the CAASPP ELA exam was 47%. California Department of Education - CAASPP Office. Additional CAASPP data can be found at <https://caaspp.cde.ca.gov/>. Research files are available at: <https://caaspp.cde.ca.gov/sb2016/ResearchFileList>



**Table 10.** Los Angeles County School Districts with Increasing Enrollment, 2003-2018, Sorted by Percent Enrollment Change

District	Enrollment 2003-04	Enrollment 2017-18	# Change	% Enroll Change	Grad Rate 2016-17	% EL* 2017-18	% FRL* 2017-18
Acton-Agua Dulce Unified	1,994	14,855	12,861	645%	94%	7%	48%
Wiseburn Unified	2,008	4,495	2,487	124%	-	8%	37%
Alhambra Unified	11,163	16,855	5,692	51%	94%	24%	67%
Gorman Joint	1,995	2,604	609	31%	-	3%	41%
Hermosa Beach City Elem	1,044	1,361	317	30%	-	2%	5%
Westside Union Elementary	7,433	9,434	2,001	27%	-	7%	48%
Eastside Union Elementary	2,720	3,402	682	25%	-	24%	89%
Redondo Beach Unified	8,057	9,937	1,880	23%	96%	5%	17%
West Covina Unified	10,518	12,754	2,236	21%	92%	8%	66%
William S. Hart Union High	21,122	25,080	3,958	19%	94%	7%	31%
San Gabriel Unified	6,265	7,244	979	16%	88%	23%	64%
South Pasadena Unified	4,199	4,794	595	14%	92%	6%	19%
El Segundo Unified	3,196	3,474	278	9%	98%	4%	17%
Claremont Unified	6,846	7,075	229	3%	94%	6%	38%
Manhattan Beach Unified	6,441	6,647	206	3%	97%	1%	5%
Culver City Unified	6,850	7,048	198	3%	96%	11%	34%
Antelope Valley Union High	22,148	22,726	578	3%	83%	10%	71%
Temple City Unified	5,702	5,831	129	2%	96%	20%	44%
Palmdale Elementary	22,736	22,777	41	0%	-	24%	85%
<b>Total</b>	152,437	188,393	35,956	24%	-	-	-
<b>Average</b>	8,023	9,915	1,892	24%	92%	12%	51%

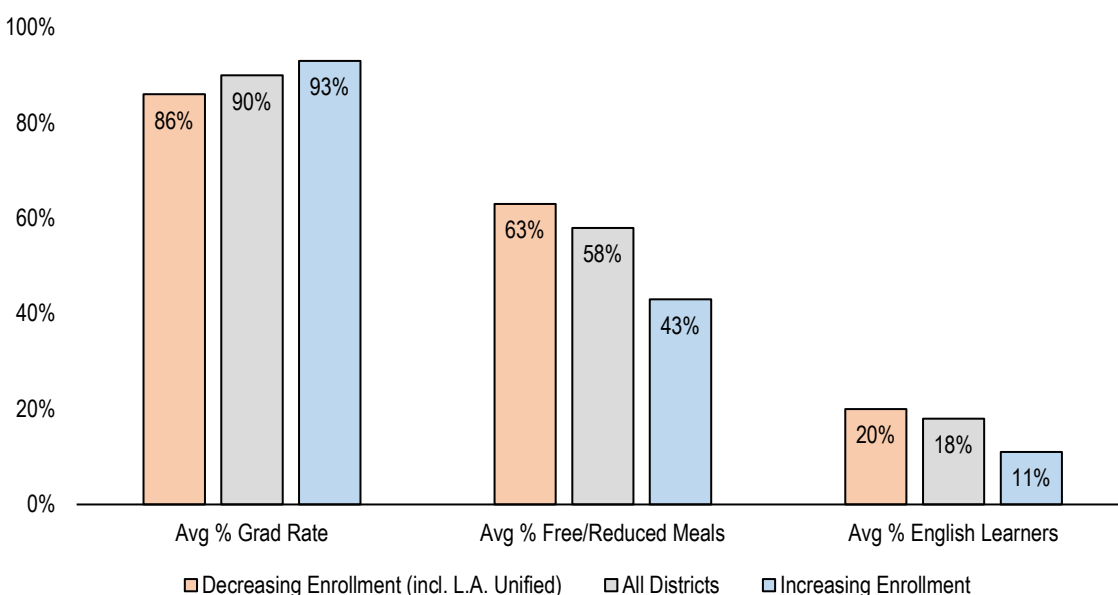
\* EL refers to English Learners; FRL refers to eligibility for federal meal programs based on poverty.

Source: CDE Data Reporting Office – Dataquest County Enrollment with District Data Report

Note: Average for last three columns is weighted by school enrollment.

Districts in L.A. County with enrollment growth over the last 15 years have several attributes in common. As seen in Figure 6, the districts in L.A. County that have increased enrollment since 2003-2004 have higher graduation rates, fewer students who qualify for free or reduced-price meals for low income families, and fewer students who are English learners, compared to the Districts that lost the most students.

**Figure 6.** Characteristics of Districts in L.A. County with Decreasing and Increasing Enrollments, 2003-2018



Source: CDE Data Reporting Office Dataquest: County Enrollment with District Data Report; County Graduation Rate with District Data Report; Create Your Own Report County with District Data, including Free or Reduced-Price Meals and English Learners

However, these patterns do not tell the whole story. Several districts, including Eastside Union, Antelope Valley, and Palmdale, have relatively high levels of eligibility for free or reduced-price lunches and English Learner levels comparable to L.A. Unified—yet they still saw growth. A hypothesis that may help explain these patterns is that both affordability and quality attract students; further research would be necessary to test this hypothesis and quantify the relationships.

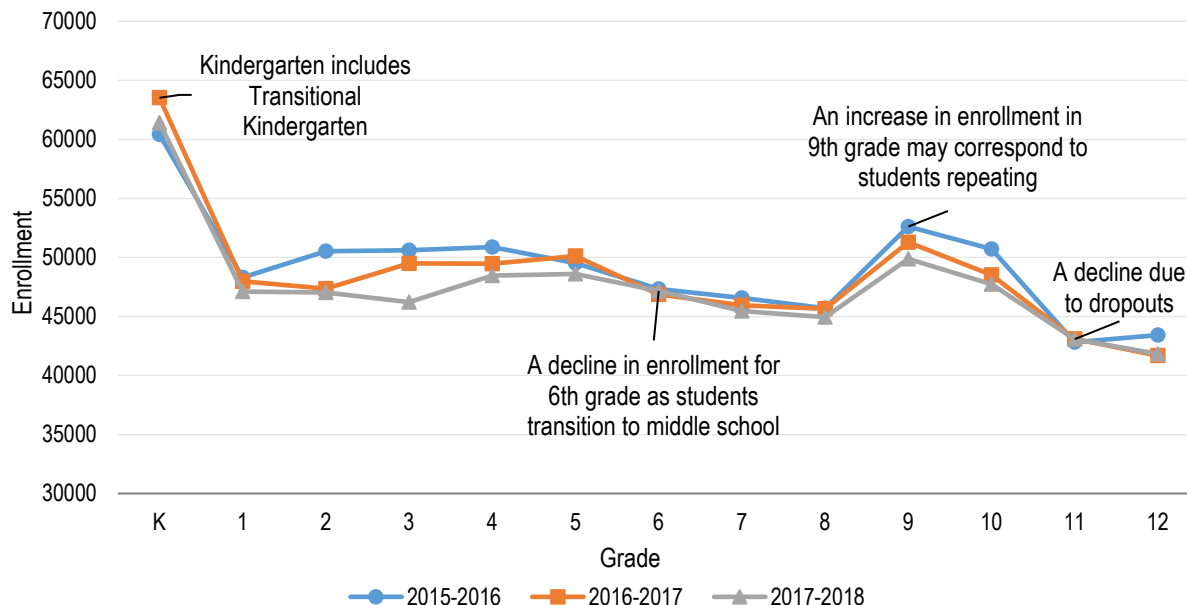
### c. Enrollment Changes between Grade Levels

In addition to differences in enrollment change between counties and within Los Angeles County, there are differences in enrollment grade-to-grade within L.A. Unified.<sup>19</sup> As seen in Figure 7, there are four major changes in enrollment that have occurred across grade levels in each of the last three years.

- A drop occurs between kindergarten and first grade. The fact that kindergarten enrollment also includes transitional kindergarten students partly accounts for the enrollment difference between these grade levels.
- Enrollment drops between 5<sup>th</sup> and 6<sup>th</sup> grade as students transition to middle school.
- An increase appears in the data in 9<sup>th</sup> grade. This likely corresponds to students repeating the grade, which inflates the enrollment for 9<sup>th</sup> grade, and does not represent a net increase in overall enrollment.
- A drop-off occurs between 10<sup>th</sup> and 11<sup>th</sup> grade, which likely corresponds to students dropping out of school.

<sup>19</sup> Note: The IAU analyzed changes in enrollment by grade level by local district and found similar patterns across local districts.

**Figure 7.** L.A. Unified Changes in Enrollment by Grade Level, 2015-2016 to 2017-2018



Source: CDE Data & Statistics Student & School Data Files "Enrollment by School" 2015-2016, 2016-2017, and 2017-2018

Note: Includes independent charter schools

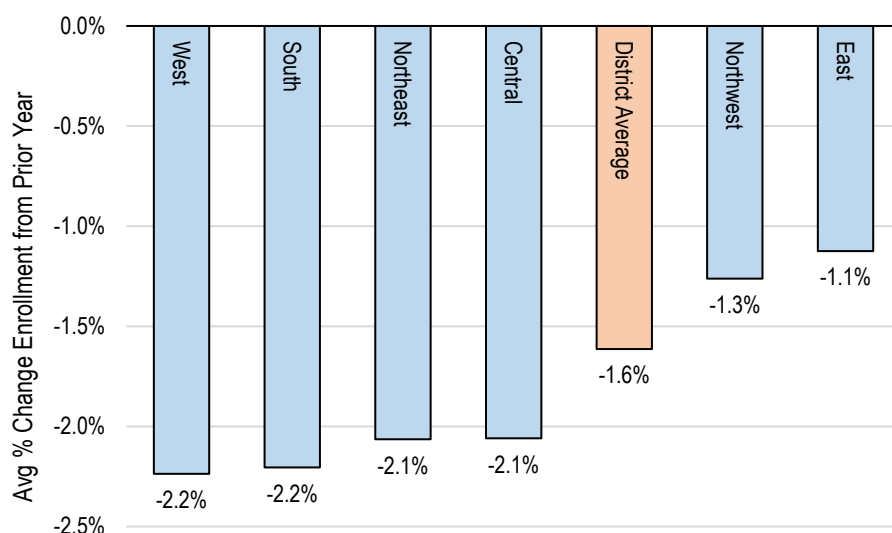
These changes in year-to-year enrollment may represent areas for focused, grade-level specific interventions. Further study that tracks individual students is needed to identify the specific transition points that matter and what factors are involved.

#### d. Enrollment Changes among Local Districts

The IAU also examined changes in enrollment by grade level for each local district and found similar patterns to those for the overall District (Figure 7). However, there were some slight differences in how much enrollment loss each local district experienced each year (Figure 8). Analyzing the past three years of enrollment, including independent charter schools, we found that, on average, Local Districts West and South declined twice as fast as Local District East (an average annual decline of 2.2% and 1.1% respectively).

This drop represents 2,500-5,000 students fewer over three years for each Local District. Although this number is small as a percentage of the total student population in the local districts, it shows that enrollment loss varies across the District.

**Figure 8.** Average % Change in Enrollment from Prior Year by L.A. Unified Local District, 2015-2016 to 2017-2018



Source: CDE Data & Statistics Student & School Data Files "Enrollment by School" 2015-2016, 2016-2017, and 2017-2018

Note: Includes independent charter schools. Average percent change numbers represent annualized percent change.

## 5. COST OF THE DECLINE

The state funds school districts based on their *average daily attendance* (ADA). When attendance goes down, so does revenue for the District. Obviously, attendance goes down when enrollment decreases because students who are not enrolled cannot attend. Table 11 shows how the District's Local Control Funding Formula (LCFF) revenue—which is the largest single source of income for the District—will change over the next few years according to the District's budget and attendance projections.<sup>20</sup>

**Table 11.** Change in L.A. Unified Projected ADA and Projected LCFF Revenue from 2017-18 to 2020-21

Years	Projected ADA	# Change in ADA	% Change in ADA	Projected LCFF \$ Revenue	\$ Change in Revenue	% Change in Revenue	Cumulative \$ Change in Revenue Post-2019
2017-2018	442,951			5,232,784,512			
2018-2019	433,079	-9,872	-2.23%	5,305,505,521	72,721,010	1.39%	
2019-2020	421,100	-11,979	-2.77%	5,294,636,629	-10,868,892	-0.20%	-10,868,892
2020-2021	406,945	-14,155	-3.36%	5,233,563,583	-61,073,046	-1.15%	-82,810,830
2021-2022	394,737	-12,208	-3.00%	5,214,307,270	-19,256,313	-0.37%	-174,009,081
<b>Total</b>		-48,215	10.89%		-18,477,241	-0.35%	
<b>Average</b>	419,762	-12,054	-2.84%	5,262,003,251		-0.09%	

Source: California Department of Education School Fiscal Services Division, LCFF – Funding Snapshot 2017-18; L.A. Unified Superintendent's Final Budget and 2018-19 and IAU LCFF Calculator

<sup>20</sup> The LCFF projections in this report are based on statutory raises in LCFF rates, which are called Cost of Living Adjustments (COLAs) even though they are not based on actual inflation. The figures given here were calculated before the announcement of the 2019-2020 Governor's Budget, which proposes a slight increase in the statutory rate. These numbers remain valid as conservative projections.

As shown in Table 11, in the current school year, 2018-2019, revenue is expected to increase from last year due to full implementation of the funding formula, even though enrollment and attendance are expected to fall. Next year, however, revenue will fall about 2 cents for every \$100 dollars. The year after that, revenue loss will be greater, about \$1.15 for every \$100. As an annual percentage, this may sound small, but it amounts to \$61 million in 2020-2021 alone, and a **cumulative reduction of \$174 million** for the three-year period through 2021-2022.

Of course, when revenues fall due to lower enrollment and attendance, so do costs. Having fewer students means the District needs fewer teachers. Since one teacher is needed for every 24 students, then the District will need about 590 fewer teachers in 2020-2021 versus 2019-2020 if enrollment drops by over 14,000 in that year (even assuming efficient and even distribution of teachers across all schools). However, reductions in force would come from the ranks of early-career teachers, who receive lower-than-average salaries. A conservative rough estimate of the average savings per teaching position would be about \$87 thousand, and total savings would be about \$51 million.<sup>21</sup> Therefore, to save \$61 million in 2020-2021, the District would have to identify *at least* \$10 million in cuts separate from an enrollment-related reduction in teaching force. Due to various inefficiencies (some inevitable, some avoidable upon further analysis), the *required* cuts would be likely to involve even greater non-teacher reductions.

## 6. ASSESSING THE MANAGEABILITY OF DECLINING ENROLLMENT

Declining enrollment environments are painful for school districts, so it is important to have strategies for managing such an environment. Strategies can differ depending on the conditions of the decline and a district's enrollment position relative to other school providers. From the preceding analysis, we know that some factors of decline are out of the District's control, including birthrates and out-migration linked to socio-economic trends in the Los Angeles basin. However, other attributes of the enrollment environment may be within the District's sphere of influence and offer opportunities for adjustment to change or stabilize enrollment. These facts give rise to two distinct goals: a) to minimize any negative impact on the District's educational mission caused by enrollment-related revenue losses, and b) to soften enrollment decline at District-operated schools and perhaps reverse it in specific locations. These two goals can be complementary, but they involve different strategies and may require making realistic choices between them.

Many organizations have faced declining revenue drivers, especially businesses that are in the declining stage of their business cycles. A research-based heuristic for evaluating the manageability of a declining demand (declining enrollment) environment, adapted from one used by businesses, is displayed in Table 12. It lists three sets of structural factors and their attributes, which may be either favorable or unfavorable to the successful management of declining demand. By analyzing the situation at L.A. Unified in terms of these factors, District leadership can develop strategies for coping with enrollment decline while also achieving instructional goals.

---

<sup>21</sup> Early-career teachers are first in line when the District reduces its workforce because these teachers have the lowest seniority. The District employed approximately 900 first-year teachers in 2017-18. A first-year teacher is likely to earn about \$55 thousand. Including District-paid taxes and benefits, an estimate of compensation cost for these beginning teachers might be \$87 thousand. This is a ball-park estimate; a more precise analysis is beyond the scope of this paper. It would need to use actual pay scales and teacher counts, and also account for inefficient reductions due to the inability to reduce by fractions of a teacher when adjusting class schedules to enrollments.

**Table 12.** Structural factors that influence the attractiveness of declining industry environments

Structural Factors	<u>Manageability</u>	
	More Manageable	Less Manageable
<b><u>Conditions of demand</u></b>		
Speed of decline	Very slow	Rapid or erratic
Certainty of decline	100% certain predictable patterns	Great uncertainty, erratic patterns
Pockets of enduring demand	Several or major ones	No niches
Product/Service differentiation	Brand loyalty	Commodity-like products
<b><u>Exit barriers</u></b>		
Reinvestment requirements	None	High, often mandatory, involves capital assets
Excess capacity	Little	Substantial
Asset age	Mostly old assets	Sizable new assets and old ones not retired
Resale markets for assets	Easy to convert or sell	No markets available, substantial costs to retire
Shared facilities	Few free-standing plants	Substantial, interconnected with important businesses
<b><u>Rivalry determinants</u></b>		
Student switching costs	High	Minimal
Diseconomies of scale	None	Substantial penalty
Dissimilar strategic groups	Few	Several in same target markets

Source: Harrigan, K., & Porter, M. (1983). End-Game Strategies for Declining Industries. *Harvard Business Review*, 61(4), p. 116.

### a. Conditions of Demand

The first set of structural factors is *conditions of demand*, which includes the speed and certainty of decline, as well as opportunities for increasing or maintaining demand. Slow, predictable rates of decline are more manageable than rapid, erratic decline. On balance, these conditions of demand are manageable for District-operated schools:

As shown in earlier sections of this report, the group of potential enrollees in the attendance area—children aged 5 to 17—is **shrinking slowly and levelling off**. This situation is not likely to change in the short-to-medium term because it is driven by forces such as relative affordability in different areas of the state.

Within this stable demand environment, school provider stability is also high, with no large exits in terms of closing private and charter schools. Provider stability benefits everyone, including L.A. Unified. Stability helps keep families in the District attendance boundary; even if students attend charter or private schools today, they remain potential future enrollees in District-operated schools as long as they remain in the area.

Since the situation is clear, measurable, and known to all providers, **predictability is high**, which gives all providers opportunities to plan ahead.

In addition, **pockets of enduring demand exist, and the District is in a good position to take advantage of them**. In addition to kindergarten and extended or transitional kindergarten, L.A. Unified has already pushed forward aggressively with dual language programs and magnets. Other innovations such as online programs and school partnerships with agencies and community-based organizations (CBOs) remain to be explored.

Since K-12 schooling is quite the opposite of an interchangeable commodity-like product, **opportunities for service differentiation abound for L.A. Unified**. “Brand loyalty” is potentially a factor for parents,

and District-operated schools can do things to develop it, including building community ties and encouraging personalized learning.

## **b. Exit Barriers**

The second set of structural factors is *exit barriers*, which refers to the ease with which an organization facing decline can cut costs and divest assets. In declining industries, if firms can divest, reconfigure or downsize easily, they will not have to resort to drastic competitive measures. Though public education is different from private enterprise in competitive markets, declining enrollment in an environment with multiple providers and high exit barriers can heighten political tensions in school districts.

In the declining environment facing L.A. Unified, the major providers each face markedly different exit barriers that influence their strategic options.

For District-operated schools, **barriers to cost cutting and reconfiguration** make the environment hard to manage in general, though some options exist. The District has very large fixed costs, durable assets (including contracts), interrelatedness of services, information gaps about performance, organizational impediments to change, and social barriers to downsizing. In addition, divestment and reinvestment are difficult due to statutory requirements for public assets. Excess capacity is small now overall but is a problem in some areas of the District. As enrollments decline, excess capacity will grow with time, meaning maintenance costs continue to accrue even as revenue falls. In addition, the District owns sizeable new assets that have not yet appreciated much. All these factors limit the District's ability to divest, consolidate or downsize.

For charter schools, exit barriers certainly exist, but they are low compared to District-operated schools. Though they also have facility obligations, long-term contracts, and fixed costs, charters are nonetheless more agile in general compared to District-operated schools. Most charter schools are not co-located with L.A. Unified-operated schools, but the ones that are can readily move or close operations. Perhaps most importantly, charter school organizations lack the constitutional obligation to educate the public that makes complete divestment impossible for the District.

Interestingly, the statutory requirement for LEAs to share surplus property with charter schools reduces exit barriers for both providers. Schools with excess capacity can make it available to a charter provider that will bear some of the cost, and charters that lose enrollment can leave District property. This aspect of the environment may offer opportunities for win-win coordination among providers, within the requirements of Proposition 39, provided they can identify their shared goals and avoid punitive or predatory approaches.

## **c. Rivalry Determinants**

The third set of structural factors is *rivalry determinants*, which refers to the situation companies in decline face relative to their competitors in the same market place. In private enterprise, strong rivalries would make coping with a shrinking market difficult. However, "rivalry" means something different in the context of L.A. Unified from what it means in business.

The District faces two primary sets of rivals, which differ from each other in important ways.

First, private schools contend with both sets of public schools for enrollment but have a dramatic difference: they charge tuition (notwithstanding some portion of scholarship students). Therefore, in general, District students from families with the ability to pay tuition and only those are in the pool of

potential enrollees for private schools; to put it differently, the pool of potential enrollees is much larger for District schools than for private schools.

Second, private schools provide a premium or specialized service, whereas District schools traditionally provide a mass service, although differentiation among District school services is increasing. The fact that the enrollment share of private schools has held steady for the last 15 years suggests that the market for private schools remains stable and fixed at about 10% of the boundary area enrollment. The District's enrollment rises and falls **independent of the fortunes of private schools**.

Third, independent charter schools contend with District-operated schools for enrollment, offering similar services to students without charging tuition. However, these schools are connected to the District and are not truly independent rivals. L.A. Unified authorizes their charters and governs their quality through its reauthorization process. Furthermore, these schools utilize the same Special Education Local Plan Area (SELPA) that coordinates special education for all public schools in the District. They also utilize other services for which they pay a portion of their revenue to the District, and many share facilities with District-operated schools.

From a strict revenue standpoint (and consistent with the intent of the law, which envisions friendly competition), L.A. Unified has an interest in maximizing enrollment at District-operated schools. But from a quality perspective, the District and its students theoretically benefit when charter schools thrive and a shared body of knowledge about innovative practices expands. Therefore, the enrollment "rivalry" between District-operated schools and charter schools is **intended as a healthy and mutually beneficial process that should put school quality—rather than simply school size—first**. In this system, more intense friendly rivalries should be considered positive for the public as a whole. It should be noted here that many positive aspects of this rivalry will be lost without systematic sharing among District-operated and independent charter schools of information about practices and data about their results.<sup>22</sup>

So, District-operated schools face two primary rivalries, of which one is a true rivalry but negligible in market share (private schools), while the other is a legally-constructed friendly rivalry with historically growing market share (independent charters). The rivalry determinants in Table 12 help to analyze the manageability of these rivalries.

The first rivalry determinant is the *cost of students switching* between school providers. **This cost is low between District-operated and charter schools** given the lack of fees, the comparability of educational services and the availability and geographical spread of both types of schools. However, the cost of switching from a public school of either type to a private school is high. This factor makes enrollment decline less manageable for each public school provider, although it is a positive thing for students and families—provided they have access to the data needed to make informed decisions.

In a second rivalry determinant, **the district suffers from penalties or diseconomies of scale** in some functions, meaning its size may actually increase its costs. However, it also benefits from **advantages or economies of scale** in other functions. The extreme size gap between the District and even the largest organizations of independent charter schools is likely to make these penalties and advantages critical dimensions of success for each. Diseconomies of scale are likely to favor charter schools, while

---

<sup>22</sup> For examples of learning about practices from charter schools, see <https://achieve.lausd.net/Page/5368> and Daley, et al. (2005). Learning from Charter Schools in Los Angeles. *L.A. Unified Program Evaluation and Research Branch*. Retrieved from [https://www.researchgate.net/profile/Glenn\\_Daley/publication/265071677\\_LEARNING\\_FROM\\_CHARTER\\_SCHOOLS\\_IN\\_LOS\\_ANGELES/links/56f56d6508ae7c1fda2ee6c9/LEARNING-FROM-CHARTER-SCHOOLS-IN-LOS-ANGELES.pdf?origin=publication\\_detail](https://www.researchgate.net/profile/Glenn_Daley/publication/265071677_LEARNING_FROM_CHARTER_SCHOOLS_IN_LOS_ANGELES/links/56f56d6508ae7c1fda2ee6c9/LEARNING-FROM-CHARTER-SCHOOLS-IN-LOS-ANGELES.pdf?origin=publication_detail)



economies of scale are likely to favor the District. Further analysis is needed to test and elaborate these propositions and their implications for managing enrollment decline.<sup>23</sup>

Lastly, decline is considered less manageable when **several providers or groups of providers, using dissimilar strategies (different quality features, locations, programs and cost) compete in the same target market**, which forces all providers to face each other in direct competition for enrollment. Since there is only partial overlap between the large market for public schools and the small one for private schools, that rivalry makes enrollment decline more manageable. In contrast, the large number of independent charter schools competing with District-operated schools for the same students is a rivalry that makes combined enrollment decline less manageable.

However, this relationship is reciprocal. **Both types of public school providers face the same environment in this sense, which makes their specific quality features, locations, and programs critical for each provider seeking to attract and keep enrollment.** This description corresponds well with what was envisioned in the Charter School Act as a beneficial rivalry, stimulating both charter and non-charter public schools to motivated effort to implement the practices and features that will improve education and attract families in their markets.

In sum, this analysis shows that the declining enrollment environment facing L.A. Unified in the next few years is:

- **difficult** in terms of barriers to divestment, consolidation, downsizing, and reconfiguration; diseconomies of scale; and competition for the same students with many different providers with different features and programs; but
- **favorable** in terms of a manageable and predictable rate and pattern of decline; positive economies of scale; pockets of differentiated demand; and a vibrant, mutually beneficial competition between two sets of District-supervised public school providers that should focus enrollment-maximizing strategies on school improvement and differentiation efforts.

In light of this analysis, several options exist for managing the current enrollment decline, which we discuss in the following section.

## 7. RECOMMENDATIONS

Strategies for the District in responding to the prospect of a 1%-3% decline in enrollment in the coming years may be grouped into two major types: strategies to *mitigate the impact* of enrollment decline, and strategies to *change the trajectory* of enrollment decline, with one example of a hybrid of these two types.

---

<sup>23</sup> Boser, U. (2003). *Size Matters: A Look at School- District Consolidation* (p. 26). Center for American Progress. Retrieved from <https://www.americanprogress.org/wp-content/uploads/2013/08/SchoolDistrictSize.pdf>; Coulson, A. J., & Mackinac Center for Public Policy. (2007). *School District Consolidation, Size and Spending: "An Evaluation"*. A Mackinac Center Report. Mackinac Center for Public Policy. Retrieved from <http://www.mackinac.org/>; Duncombe, W. D., & Yinger, J. M. (n.d.). School District Consolidation: The Benefits and Costs. *AASA American Association of School Administrators*. Retrieved from <http://www.aasa.org/SchoolAdministratorArticle.aspx?id=13218>; Gordon, N., & Knight, B. (2009). A spatial merger estimator with an application to school district consolidation. *Journal of Public Economics*, 93(5–6), 752–765.

Schiltz, F., & De Witte, K. (2017). Estimating scale economies and the optimal size of school districts: A flexible form approach. *British Educational Research Journal*, 43(6), 1048–1067; Schmidt, R., & Schlottmann, A. (2007). *Does School District Size Matter?* (p. 16). Nevada Policy Research Institute.

## a. Strategies to Mitigate the Impact of Enrollment Decline

As we have seen, the largest components of enrollment decline—specifically demographic changes and migration—are beyond the direct control of the District. This points to the importance of strategies to mitigate any negative impact of the decline on the District’s educational mission toward students and on the well-being of educators and support staff who make it possible to serve students. It is important to note that the District already employs most of these strategies to varying degrees; the purpose of this discussion is not to explain the strategies in detail but to identify them specifically as relevant to the challenge of enrollment decline and, in some cases, to urge even greater, more focused use of them by the District.

### *Pursuing Increased Revenue per Student*

Declining enrollments present a fiscal problem only so far as revenues are linked to enrollment. Increasing revenue per enrolled student would soften the impact of declining enrollment. This suggests three strategies:

First, *increasing attendance rates*. At present, most of the District’s revenue is based on student attendance, itself a function of enrollment. The District has undertaken initiatives to reduce chronic absenteeism and create a culture of positive attitudes toward daily attendance. In an era of declining enrollments, it is critical to maintain focus on attendance as a vital link in the revenue chain—let alone its essential role for students in getting the most out of their schooling years.

Second, *pursuing public policies that make funding public education a higher priority*. Substantially increasing the funding rate per attendee or enrollee would cushion the District fiscally against the impact of falling enrollment, while also enabling the provision of a higher quality of instruction and support for those students who remain. The District is actively engaged in demanding higher funding for public K-12 education; this strategy is vital to the health of the District in the coming years.

Third, *pursuing sources of funds that are not tied directly or indirectly to enrollment*. There are fewer categorical funds available now than in previous years, but it is still possible to seek grants from public and nonprofit sources to support initiatives that benefit students and relieve the fiscal pressure on the District without being tightly linked to enrollments. Furthermore, raising funds through parcel taxes and/or bond initiatives can provide funding for District priorities without a direct linkage to enrollment. More vigorous efforts to raise such funds would help to insulate the District’s fiscal health from enrollment decline.

### *Increasing Efficiencies to Reduce Costs*

Reducing costs is a constant battle. Even when revenue is rising, there is a natural tendency to overspend the resources that are available without careful attention to priorities and operating efficiencies. When enrollments and therefore revenues decline, cuts become inevitable, but they are often undertaken on short notice and without attention to strategic priorities, synergistic opportunities, and the sometimes-hidden benefits of spending on support functions that are easy but perhaps foolish to cut.<sup>24</sup> The District should of course continue to *increase efficiencies that reduce costs in operating units*. The

---

<sup>24</sup> Daley, G. (2018). Three Perspectives on the Fiscal Outlook of Los Angeles Unified School District. *Los Angeles Unified School District Independent Analysis Unit*. Retrieved from [http://laschoolboard.org/sites/default/files/IAU%20Report%202018%200830%20-%20Fiscal%20Outlook\\_0.pdf](http://laschoolboard.org/sites/default/files/IAU%20Report%202018%200830%20-%20Fiscal%20Outlook_0.pdf)

Superintendent's office is presently engaged in this effort related to procurement, transportation, and other areas. Recent success in reducing the subsidization of food services shows that this can be done, especially in areas of operations. Finding similar savings in the activities of schools and classrooms without sacrificing educational quality may be more difficult, but it is essential to make the effort.

### *Closing and Consolidating Schools – Only in Specific Cases*

One response to declining enrollment is to close schools and consolidate students in fewer, larger schools. Under the right circumstances, this strategy can offer large savings. Given the number of school properties held by L.A. Unified, and the density of those sites in many areas of the District, it might be a tempting response to enrollment decline.

However, research shows that it comes with *potentially serious disadvantages and unintended consequences*. One downside of consolidation is that large schools have higher drop-out and lower graduation rates.<sup>25</sup> District consolidation of small schools to create large schools could produce adverse effects on student achievement and risk alienating families who send their children to L.A. Unified-operated schools. This structural change could therefore actually exacerbate rather than ameliorate the enrollment crisis.<sup>26</sup> It is not recommended as a global strategy for the District.

On the other hand, there may be specific locations within the District where there is demonstrated duplication of effort, where adjacent school sites have lost enrollment and might be consolidated without detriment to the educational experience of their students, or at least where the disadvantages of maintaining partially empty facilities are so great as to outweigh any disadvantages of consolidation. Such situations must be considered on a case-by-case basis, preferably in close communication with parents of the students involved and with careful analysis of the fiscal consequences, before making any decisions. Thus, consolidation is not a recommended strategy except in highly specific cases.

### **b. Strategies to Change the Trajectory of Enrollment Decline**

Although the drivers of enrollment decline are largely outside the direct control of District leadership, there are some opportunities to favorably influence the trajectory of that decline. If undertaken as a strategic initiative, this approach could be identified as a focus on *enrollment-share leadership*. This would entail energetic efforts to attract and keep enrollment wherever possible despite reductions in the population of available students. Since the overall size of the enrollment market is declining, this strategy necessarily entails competition with other providers for a larger share of that market. Keeping in mind that competition among educational providers is intended by law to be a friendly, quality-stimulating kind of competition, this approach seeks *to draw and keep students and families through positive attraction* and not through negative effects on the opportunities of other providers. The goal is to provide the best schools for all students, while allowing students and families to choose among alternatives.

---

<sup>25</sup> Duncombe, W., & Yinger, J. (2001). Does School District Consolidation Cut Costs? *Center for Policy Research*, 122. Retrieved from <https://files.eric.ed.gov/fulltext/ED537156.pdf>; Leithwood, K., & Jantzi, D. (2009). A review of empirical evidence about school size effects: A policy perspective. *Review of Educational Research*, 79(1), 464–490.

<sup>26</sup> Beuchert, L., Humlum, M., Nielsen, H., & Smith, N. (2016). The Short-Term Effects of School Consolidation on Student Achievement: Evidence of Disruption? *Institute for the Study of Labor*. Discussion Paper No. 10195. DOI: 10.2139/ssrn.2626712.

### *Providing and Publicizing Competitive and Innovative Quality*

Providing higher quality at District-operated schools across the board and publicizing that quality to attract enrollment would be a win for everyone involved. The District's push for academic excellence and for performance data transparency constitute an enrollment-growth strategy. Quality has many meanings, but it is apparent to the public through high test scores, exciting curricular offerings, attractive and well-maintained facilities, accessible and responsive staff, positive socio-emotional experiences for students, and the strength of a school's ties to the community. Strengthening connections between schools, the families that live around them, and the business and community groups in their vicinity holds promise for building enrollment by making local neighborhood schools into desirable destinations not only during the school day but all week and year-round. An especially positive dynamic can be seen when schools and communities become so well engaged that families who live near one another educate their children together and celebrate their school as a shared 'second home' for their families.

Such quality improvement is already a focus of the District, but there is a long way to go, more so for some schools and communities than for others. It is challenging given the limited resources L.A. Unified has at its disposal. This may be a chicken-and-egg problem: greater investment in all-around quality will lead to greater enrollment and greater community commitment of support for the school, which in turn will lead to greater resources to invest in quality. The District has a central role as a catalyst for these positive community effects as well as in assuring equitable access to quality education for students from all communities. If the District follows aggressive cost-cutting strategies without comparably aggressive quality-building strategies, the result may be diminishing quality, reduced enrollment, and an accelerating downward spiral. But greater investment in quality that leads to increased enrollment may offer positive fiscal returns. Importantly, quality improvement requires measurement of quality, so the District may have an advantage in terms of its information assets provided there is a sustained commitment to quality measurement for improvement.

### *Providing Niche Educational Services*

Another way to approach school improvement and attract enrollment may be to focus on the demand for *niche* educational services. The niche strategy entails identifying an educational need that is not being met or has potential for growth, and addressing that need with innovative, comprehensive, coordinated, and high-quality programming. Again, some of these already exist, but could become major initiatives attracting enrollment.

Early childhood education, dual language education, and career-field magnet schools are examples where the District already has strong programs but has room for growth. Innovative programming could include high school completion and early college options involving partnerships with city agencies, community-based organizations, community colleges, and other institutes of higher education. Joint high school diplomas with associate degrees could be very appealing as well as opening the door to many 21st Century careers. High school career programs that are keyed to shortages in the District are another option, such as preparation for the licensed vocational nurse pathway to a school nursing career.

Any program that leverages the District's comparative advantages—extensive reach, ability to articulate curricula vertically across all school levels, vast operational and facilities resources, and large enrollment share—is a good option to attract additional enrollment. In addition, when such programs serve disadvantaged student subgroups in pockets of enduring demand within Los Angeles, they promote equity

and community growth in addition to creating attractive opportunities for students to enroll and re-enroll in District schools.

L.A. Unified is well-positioned to lead in such niche segments and can intensify efforts to create and expand the programming that will meet differentiated needs. Independent charter schools are expected to be innovative, but at times their small size and financial limitations may make it more difficult for them to take the risk of true innovation. District-operated schools, on the other hand, have the advantage of support from a large, stable, resourceful organization. The District can innovate through a diversity of small-scale pilots at less overall risk than would be faced by a single standalone school. This positioning gives the District a comparative advantage for the pool of potential enrollment within its boundary area.

### *Reducing Dropout Rates*

As the stock-flow model in Figure 3 illustrates, reducing dropout rates while holding other factors equal will have the effect of increasing enrollment share within the same overall enrollment market. L.A. Unified has made great progress in decreasing the dropout rate over time. From 2014-2015 to 2016-2017, the number of dropouts per year decreased by over 3,000 students, but there is room to improve. Independent charter schools in the Los Angeles area average a dropout rate of less than 0.5%, while L.A. Unified operated schools average a rate slightly below 1.0% (see Appendix Figure A). While this comparison is potentially confounded by the role of selection in charter school statistics,<sup>27</sup> it suggests that a goal of a 0.5% dropout rate for L.A. Unified might be a realistic but demanding challenge. Progress on this measure will improve enrollment as well as attendance-based funding.

### *Incentivizing Enrollment*

Another way to seize enrollment-share leadership is to incentivize enrollment. Incentives in the form of college scholarships for high school graduates were tested across districts within Kalamazoo County, Michigan. The Kalamazoo Promise program was found to increase total public-school enrollment by roughly 4%, driven almost exclusively by primary school enrollment.<sup>28</sup>

A Promise-type scholarship is a universal or near-universal, place-based scholarship program. In the years after Kalamazoo implemented the program, the school district had increased public school enrollment, increased academic achievement, had reductions in behavioral issues, and increased rates of post-secondary attendance.

Several other cities or counties have initiated similar place-based college scholarship programs, including: Denver, CO; Detroit, MI; New Haven, CT; Pittsburgh, PA; Buffalo, NY; and Ventura County, CA. On average, the announcement of a Promise program increases public school enrollment, most often in primary schools (K-4). Requirements vary, but all programs include some number of required years of continuous high school enrollment within a specific district or county. Some programs also include minimum GPA or attendance requirements; programs also differ on how much funding a scholarship offers, frequently on a sliding scale based on need.

---

<sup>27</sup> Charter schools are not permitted to select students on the basis of whether they are expected to succeed. However, it is hypothetically possible that there is pressure on students with low achievement and/or behavioral problems to leave the school. If such students transfer to District-operated schools and subsequently drop out, they will be recorded as District dropouts and not charter dropouts. Research is needed to test and quantify this hypothesis.

<sup>28</sup> LeGower, M., & Walsh, R. (2017). Promise Scholarship Programs as Place-making Policy: Evidence from School Enrollment and Housing Prices. *Journal of Urban Economics*, 101, 74-89. DOI: 10.3386/w20056.

However, researchers have found that the most effective programs are those with the fewest restrictions. Merit based requirements have been found to potentially increase educational inequity. More flexible scholarships across a wider range of colleges and programs has been found to generate larger increases in total public school enrollment than those scholarships that are restricted to one or two colleges or certificate programs.

### **c. A Hybrid of Strategies: District Reorganization/Reimagining**

The above strategies focus either on mitigating the impact of declining enrollment or favorably influencing the trajectory of the decline. In simpler terms, they might be summarized as cutting costs and improving quality. These two goals are often in conflict, since many of the things we might do to cut costs will have a negative impact on quality, while many of the things we might do to increase quality will cost money to achieve. Therefore, it is useful to identify—wherever possible—strategies with the potential to cut costs and improve quality at the same time.

The Superintendent’s current reimagining initiative might represent progress on both dimensions, depending on how it is ultimately designed and implemented. Among other things, it involves restructuring the District to increase local control and responsibility for decisions about the use of funds for instruction and services at schools, while increasing local accountability for those funds. It also seeks to relocate District services that support multiple schools closer to those schools, which should both increase responsiveness to school needs and reduce the overhead costs that arise when support services are too distant from where they are needed. This requires an upfront investment of funds as a catalyst to initiate change.

It is possible that restructuring the District along these lines will increase the quality of instruction and support for students and families at schools while also reducing financial costs. If this strategy is to serve both goals, it must be designed and implemented with caution. **Restructuring for its own sake runs the risk of unintentionally increasing costs, reducing quality and enrollment appeal, or both.**

Furthermore, if one of the goals is to increase the attractiveness of District-operated schools to families who have other choices of providers available, it is essential to engage parents in the planning process and to utilize data and research about what parents value in making enrollment decisions for their children.

Finally, **the specific decisions made in the restructuring process should be shaped by a conscious intention to make the District and its schools more effective and efficient in a declining-enrollment environment.** This process represents an opportunity to assess the potential for consolidating schools where needed and reducing or repositioning non-school support facilities where needed. For decades, the District’s organizational evolution has taken place within the expectation that enrollments would grow indefinitely; the resulting structure is probably not optimal for declining enrollments. This moment represents an opportunity to redesign the organization for lower costs and higher quality despite declining enrollments.

## **8. SUMMARY**

Enrollment should be understood as a stock or accumulation of students that grows or shrinks in accordance with the flows of students in and out. The main flow into this enrollment stock is from children being born in the Los Angeles region, and this flow has shrunk from a rush to a trickle over the last 15 years. At the same time, the relative lack of affordable housing in Los Angeles County and availability of housing in neighboring counties has produced a strong outflow of families. Another

outflow from the enrollment stock is dropouts, which have been shrinking over the last few years. The District has limited possibilities for dealing with declining birthrates, but can make efforts to decrease dropouts and retain families who choose to move away for quality-related reasons. Other than that, enrollment growth must come from new sources.

Enrollment loss leads to revenue loss. The IAU estimates a cumulative decrease in LCFF revenue of approximately \$174 million over the next three years. This number could fluctuate if enrollment exceeds projections or if new sources of revenue are found, but barring these developments, the District must reduce expenditures commensurate with enrollment loss. The enrollment decline is relatively slow and steady, which makes it more manageable if this information is used for planning ahead through thoughtful cost-reduction and enrollment-share leadership. Staff reductions associated with having fewer students in the classroom can comprise some but not all the cost savings needed.

Though overall enrollment growth is a challenge (and regaining historical levels of enrollment is unlikely), possibilities exist at the margins to attract new students by providing quality schools overall, specialized programs that effectively achieve their goals, and innovative programs that attract additional students. This report has identified several strategies for mitigating the impact of declining enrollment and influencing the trajectory of enrollment decline. While there may be value in making use of all of them, a handful of the recommendations stand out as strategic responses to the District's changing circumstances. These highest priority recommendations are:

- Pursue increased revenue per student through public activism.
- Increase efficiencies to reduce costs without sacrificing educational quality.
- Continue to focus on innovation and school quality improvement in instruction and in the facilities and services that attract students and families.
- Lead in niche segments such as early childhood education and dual language instruction that take advantage of the District's strengths and position.
- Restructure the District to optimize for declining enrollment; the current reimagining initiative provides an opportunity to design the organization to provide support more closely linked to schools and to operate more efficiently than an organization historically organized around larger enrollments.

## APPENDIX

**Table A.** Los Angeles County School Districts by % Enrollment Change, 2003-2018

District	Enroll 2003-04	Enroll 2017-18	# Enroll Change	% Enroll Change	Grad Rate 2016-17	% EL 2017-18	% FRL 2017-18
Acton-Agua Dulce Unified	1,994	14,855	12,861	645%	94%	7%	48%
Wiseburn Unified	2,008	4,495	2,487	124%	-	8%	37%
Alhambra Unified	11,163	16,855	5,692	51%	94%	24%	67%
Gorman Joint	1,995	2,604	609	31%	-	3%	41%
Hermosa Beach City Elementary	1,044	1,361	317	30%	-	2%	5%
Westside Union Elementary	7,433	9,434	2,001	27%	-	7%	48%
Eastside Union Elementary	2,720	3,402	682	25%	-	24%	89%
Redondo Beach Unified	8,057	9,937	1,880	23%	96%	5%	17%
West Covina Unified	10,518	12,754	2,236	21%	92%	8%	66%
William S. Hart Union High	21,122	25,080	3,958	19%	94%	7%	31%
San Gabriel Unified	6,265	7,244	979	16%	88%	23%	64%
South Pasadena Unified	4,199	4,794	595	14%	92%	6%	19%
El Segundo Unified	3,196	3,474	278	9%	98%	4%	17%
Claremont Unified	6,846	7,075	229	3%	94%	6%	38%
Manhattan Beach Unified	6,441	6,647	206	3%	97%	1%	5%
Culver City Unified	6,850	7,048	198	3%	96%	11%	34%
Antelope Valley Union High	22,148	22,726	578	3%	83%	10%	71%
Temple City Unified	5,702	5,831	129	2%	96%	20%	44%
Palmdale Elementary	22,736	22,777	41	0%	-	24%	85%
Centinela Valley Union High	7,565	7,501	-64	-1%	85%	18%	75%
Bonita Unified	10,203	10,088	-115	-1%	94%	6%	38%
Newhall	6,672	6,537	-135	-2%	-	24%	42%
Palos Verdes Peninsula	11,605	11,346	-259	-2%	98%	8%	7%
Saugus Union	10,204	9,960	-244	-2%	-	12%	24%
Downey Unified	22,523	21,962	-561	-2%	95%	15%	69%
Sulphur Springs Union	5,573	5,395	-178	-3%	-	21%	54%
Lancaster Elementary	15,799	15,212	-587	-4%	-	17%	85%
La Canada Unified	4,343	4,167	-176	-4%	98%	5%	5%
Lowell Joint	3,305	3,147	-158	-5%	-	8%	40%
Arcadia Unified	9,992	9,460	-532	-5%	98%	13%	26%
Whittier Union High	12,557	11,851	-706	-6%	89%	9%	72%
Lennox	7,696	7,244	-452	-6%	-	41%	93%
San Marino Unified	3,266	3,072	-194	-6%	95%	10%	7%
Glendora Unified	7,924	7,444	-480	-6%	97%	6%	30%
Torrance Unified	25,229	23,496	-1,733	-7%	96%	16%	30%
Las Virgenes Unified	12,170	11,323	-847	-7%	92%	6%	13%
East Whittier City Elementary	9,332	8,650	-682	-7%	-	12%	53%
Walnut Valley Unified	15,458	14,310	-1,148	-7%	97%	12%	22%
ABC Unified	22,226	20,550	-1,676	-8%	91%	19%	52%
Duarte Unified	4,692	4,318	-374	-8%	90%	18%	67%
Lawndale Elementary	6,484	5,953	-531	-8%	-	33%	83%
Keppel Union Elementary	2,976	2,718	-258	-9%	-	34%	83%
Paramount Unified	17,013	15,213	-1,800	-11%	87%	34%	92%
Burbank Unified	17,066	15,173	-1,893	-11%	93%	11%	37%
Glendale Unified	29,433	26,071	-3,362	-11%	89%	22%	50%
El Monte Union High	10,254	8,880	-1,374	-13%	84%	20%	88%
Baldwin Park Unified	19,287	16,695	-2,592	-13%	92%	19%	87%
Little Lake City Elementary	5,220	4,475	-745	-14%	-	15%	71%
Hawthorne	9,875	8,364	-1,511	-15%	-	30%	88%
Monrovia Unified	6,578	5,563	-1,015	-15%	89%	13%	60%
Whittier City Elementary	7,232	6,104	-1,128	-16%	-	17%	75%
Santa Monica-Malibu Unified	12,842	10,806	-2,036	-16%	93%	9%	24%
<b>Los Angeles Unified</b>	<b>747,009</b>	<b>621,414</b>	<b>-125,595</b>	<b>-17%</b>	<b>76%</b>	<b>23%</b>	<b>81%</b>
Pasadena Unified	22,669	18,164	-4,505	-20%	85%	15%	59%
Covina-Valley Unified	15,035	11,862	-3,173	-21%	95%	9%	68%
Bellflower Unified	15,522	11,946	-3,576	-23%	91%	19%	69%
Rowland Unified	18,384	14,132	-4,252	-23%	88%	25%	75%



District	Enrollment 2003-04	Enrollment 2017-18	# Change	% Change	Grad Rate 2016-17	% EL 2017-18	% FRL 2017-18
Valle Lindo Elementary	1,365	1,049	-316	-23%	-	13%	85%
Beverly Hills Unified	5,130	3,933	-1,197	-23%	95%	6%	17%
Long Beach Unified	97,560	74,681	-22,879	-23%	86%	20%	67%
Norwalk-La Mirada Unified	24,101	17,890	-6,211	-26%	93%	19%	73%
Montebello Unified	35,952	26,521	-9,431	-26%	81%	32%	81%
Compton Unified	32,486	23,665	-8,821	-27%	79%	34%	86%
Rosemead Elementary	3,355	2,438	-917	-27%	-	43%	80%
Hacienda la Puente Unified	25,499	18,438	-7,061	-28%	91%	20%	73%
Lynwood Unified	19,658	14,211	-5,447	-28%	85%	34%	90%
El Rancho Unified	12,166	8,674	-3,492	-29%	90%	19%	72%
Garvey Elementary	6,584	4,670	-1,914	-29%	-	41%	82%
El Monte City	11,713	8,233	-3,480	-30%	-	33%	92%
Azusa Unified	12,134	8,270	-3,864	-32%	88%	26%	83%
LA County Office of Education	11,829	8,062	-3,767	-32%	42%	18%	72%
Los Nietos	2,385	1,617	-768	-32%	-	30%	82%
Inglewood Unified	17,969	12,086	-5,883	-33%	81%	27%	82%
Pomona Unified	35,412	23,741	-11,671	-33%	88%	29%	86%
Charter Oak Unified	7,110	4,765	-2,345	-33%	93%	10%	57%
Mountain View Elementary	10,192	6,773	-3,419	-34%	-	58%	91%
Wilsona Elementary	2,073	1,308	-765	-37%	-	30%	92%
South Whittier Elementary	4,556	2,781	-1,775	-39%	-	45%	90%
Castaic Union	3,589	2,153	-1,436	-40%	-	11%	33%
Bassett Unified	6,039	3,611	-2,428	-40%	95%	28%	89%
Hughes-Elizabeth Lakes Union	418	191	-227	-54%	-	4%	53%
<b>Total</b>	1,732,925	1,482,745	-250,180	-14%	-	-	-
<b>Average</b>	21,394	18,305	-3,089	-2%	90%	18%	58%

Source: CDE Dataquest Enrollment Report, Los Angeles County (with district data) for FY04 and FY18

**Table B.** California Counties by Percent of Enrollment Change, 2003-2018

County	Enrollment 2003-04	Enrollment 2017-18	# Change	% Change	Grad Rate 2016-17	% EL 2017-18	% FRL 2017-18
Sutter	16,976	23,690	6,714	40%	81%	17%	63%
Inyo	3,265	4,497	1,232	38%	38%	16%	71%
Placer	61,718	74,063	12,345	20%	89%	7%	29%
Kern	160,157	189,949	29,792	19%	85%	20%	74%
Marin	28,506	33,741	5,235	18%	88%	15%	29%
Riverside	364,857	428,992	64,135	18%	88%	19%	65%
Madera	27,188	31,728	4,540	17%	82%	25%	79%
Tulare	90,230	104,049	13,819	15%	84%	26%	77%
San Joaquin	131,769	148,948	17,179	13%	81%	22%	64%
Kings	26,846	29,203	2,357	9%	83%	20%	71%
Santa Clara	251,198	272,132	20,934	8%	84%	23%	38%
Merced	54,541	58,812	4,271	8%	89%	25%	78%
San Mateo	88,477	95,155	6,678	8%	87%	22%	34%
Contra Costa	165,571	178,060	12,489	8%	88%	17%	41%
Imperial	35,115	37,716	2,601	7%	87%	42%	76%
Fresno	190,744	204,418	13,674	7%	81%	20%	74%
Colusa	4,384	4,627	243	6%	94%	38%	76%
Monterey	73,863	77,954	4,091	6%	84%	39%	72%
Alameda	216,822	228,356	11,534	5%	86%	21%	44%
Stanislaus	104,697	109,990	5,293	5%	84%	24%	69%
Sacramento	235,269	245,906	10,637	5%	81%	17%	60%
Santa Barbara	67,517	69,752	2,235	3%	87%	30%	63%
Napa	19,765	20,402	637	3%	88%	23%	51%
Santa Cruz	39,140	40,393	1,253	3%	85%	26%	53%
Yolo	29,321	30,067	746	3%	87%	20%	52%
San Francisco	59,414	60,898	1,484	2%	72%	28%	52%
San Diego	499,356	508,169	8,813	2%	80%	20%	51%
Tehama	11,083	10,958	-125	-1%	84%	18%	71%
Yuba	14,786	14,619	-167	-1%	80%	16%	70%
Sonoma	72,799	70,449	-2,350	-3%	82%	21%	48%
San Benito	11,674	11,253	-421	-4%	88%	26%	58%
San Bernardino	419,084	403,137	-15,947	-4%	83%	17%	72%
El Dorado	29,072	27,875	-1,197	-4%	89%	7%	33%
Ventura	145,316	137,758	-7,558	-5%	86%	23%	54%
San Luis Obispo	36,804	34,733	-2,071	-6%	90%	13%	45%
Orange	515,464	485,835	-29,629	-6%	89%	24%	49%
Butte	33,768	31,760	-2,008	-6%	84%	7%	59%
Glenn	6,063	5,581	-482	-8%	74%	20%	71%
Lake	10,416	9,549	-867	-8%	76%	14%	77%
Humboldt	20,220	18,501	-1,719	-9%	84%	8%	61%
Shasta	29,689	26,935	-2,754	-9%	87%	4%	55%
Mendocino	14,679	13,203	-1,476	-10%	82%	22%	72%
Solano	71,737	63,481	-8,256	-12%	82%	13%	52%
Siskiyou	6,852	5,934	-918	-13%	87%	4%	63%
<b>Los Angeles</b>	<b>1,742,873</b>	<b>1,492,652</b>	<b>-250,221</b>	<b>-14%</b>	<b>81%</b>	<b>21%</b>	<b>69%</b>
Mono	2,233	1,890	-343	-15%	35%	26%	61%
Tuolumne	7,601	6,076	-1,525	-20%	83%	2%	50%
Calaveras	6,843	5,461	-1,382	-20%	91%	4%	54%
Del Norte	5,434	4,228	-1,206	-22%	76%	7%	65%
Amador	5,357	4,147	-1,210	-23%	87%	3%	46%
Nevada	15,119	11,424	-3,695	-24%	52%	6%	52%
Trinity	2,101	1,584	-517	-25%	72%	2%	64%
Mariposa	2,561	1,865	-696	-27%	92%	4%	59%
Plumas	3,156	2,169	-987	-31%	84%	4%	55%
Lassen	6,174	3,791	-2,383	-39%	90%	3%	50%
Modoc	2,302	1,411	-891	-39%	86%	20%	66%
Sierra	669	407	-262	-39%	100%	4%	47%
Alpine	148	80	-68	-46%	-	0%	73%
<b>Total</b>	<b>6,298,783</b>	<b>6,220,413</b>	<b>-78,370</b>	<b>-1%</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Average</b>	<b>108,600</b>	<b>107,249</b>	<b>-1,351</b>	<b>-3%</b>	<b>82%</b>	<b>17%</b>	<b>59%</b>

Source: CDE Dataquest Enrollment Report, California (with county data) for FY04 and FY18

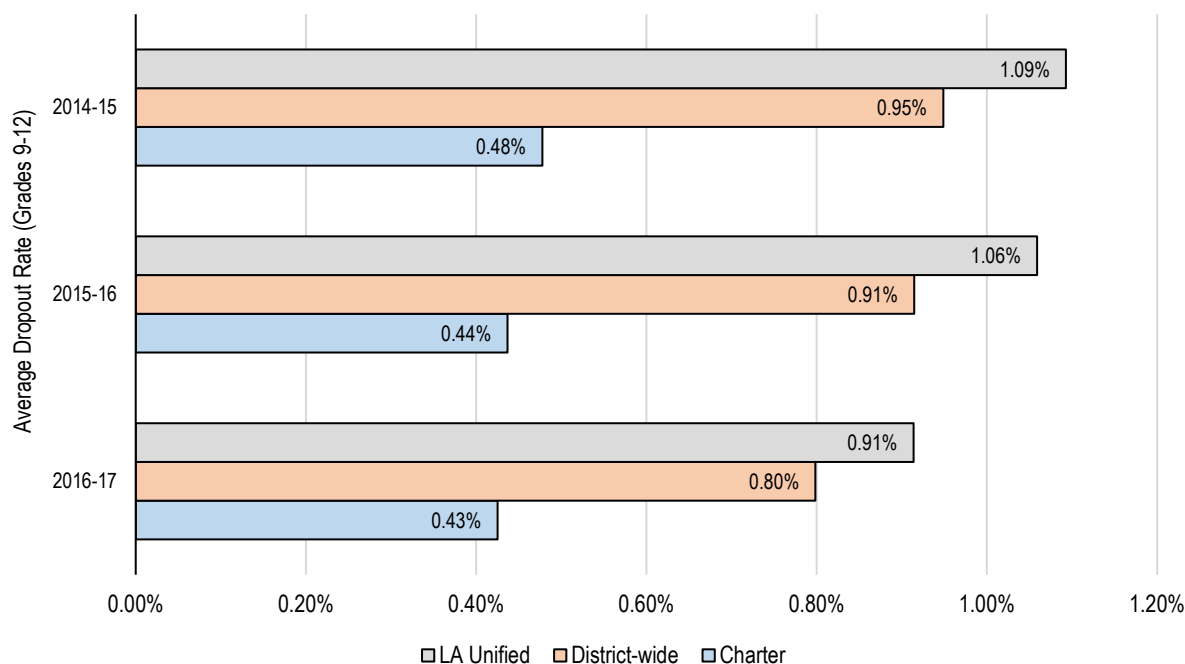
**Table C.** Dropouts Grades 7-12 in L.A. Unified by Charter and District-managed Schools (2014-2017)

	2014-2015		2015-2016		2016-2017	
	% of Total Dropouts	% of Total Schools	% of Total Dropouts	% of Total Schools	% of Total Dropouts	% of Total Schools
Charter Schools	6.3%	33.3%	7.7%	34.4%	10.2%	35.1%
L.A. Unified Schools	93.7%	66.7%	92.3%	65.6%	89.8%	64.9%

Source: CDE Dataquest Dropouts by Grade (with school data) for FY15, FY16, and FY17

Note: Dropouts include grades 7-12, and the percent of schools represents the schools that enroll these grades, not the total number of schools in the District.

**Figure A.** Dropout Rate (Grades 9-12) in L.A. Unified by Independent Charter and District-operated Schools (2014-2017)



Source: CDE Dataquest Create Your Own Report, 1-Yr Dropout Rates (with school data) for FY15, FY16, and FY17

Note: These data are presented here for rough comparison purposes. They likely express selection bias—independent charter schools and District-operated schools may enroll students with different likelihoods of remaining enrolled; L.A. Unified-operated school dropout rates exclude continuation high schools, which had an average dropout rate of 27% over three years.