Projecting K-12 Public School Enrollments: Are Big Changes Ahead for the Los Angeles Unified School District?

Afternoon Roundtable Presentation
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“BIG CHANGES AHEAD IN POST-RECESSION CALIFORNIA”

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DOF Public K-12 Graded Enrollment Projections for LA County (2014 Series)

Projected

6.5% decline
Master Planning and Demographics produces K-12 enrollment projections mainly to support facilities master planning, District budgeting, and individual school planning for each upcoming school year.

As you might imagine, Master Planning and Demographics (MPD) has an interest in monitoring local K-12 enrollments projections from the DOF. MPD uses the DOF projections as a sounding board to evaluate our own projections.

This newest DOF projection is a change from earlier projections, which projected steeper declines and fewer students.

Notice that enrollments are projected to steadily decline through the projection horizon.

As we’ll see, projections for the Los Angeles Unified School District (LAUSD) show a somewhat different outlook.
LAUSD K-12 Enrollment Projections

Los Angeles Unified School District
Projected Public K-12 Graded Enrollment through SY 2023-24

- Actual
- Projected

2.7% LOSS
8% LOSS

Master Planning and Demographics Unit, Los Angeles Unified Schools District, 2010-2011 (February 2011) & 2011-12 Series, (February 2012).
Every year, MPD asks itself questions such as “Are there Big Changes ahead?...” for LAUSD enrollments? For school capacities? In the short term? In the long term?

Here we are looking at MPD’s own projections, along with over a decade of actual enrollment history. We can see that LAUSD has already been through Big Changes since 2002, when enrollments began to decline sharply. We can also see that the decline has been slowing in more recent years.

Looking into the future, one of the “Big Changes” LAUSD is looking for is the year when enrollments are expected to rebound. Our most recent projections show that the gradual decline in enrollments will last until 2019-20 school year, when beginning school year 2020-21 enrollments will then begin a slow creep upward.

MPD evaluates projections annually and revises them with new and timely data.

Let’s take a minute to look at how MPD has adjusted previous enrollment projections during it’ annual enrollment projection cycles.

For the earliest set of projections (2010), MPD initially projected for a smaller amount of loss and earlier rebound. The following year (2011-12) MPD’s projections for LAUSD were adjusted to show a bigger change in the amount of decline- as were the DOF projections. Three years later, for the 2014 projection series (pink line) - the decline has been tempered, as has been the rebound- Resulting in a tempering of any Big Changes to expected enrollments.

Along, both MPD and the DOF has expected decline into the coming decade. However, unlike the DOF LAUSD expects enrollments to bound within the decade.

PD’s more optimistic outlook incorporates programmatic improvements including improvements in grade-to-grade retentions rates and increased interest in public school enrollment.

Now, let’s look at birth projections and how they may result in Big Changes for LAUSD’s kindergarten projections.
DOF Birth Projections for California (2014 Series)

5.9% increase
particular population trends that influence enrollment projections are fertility and birth trends.

The DOF, MPD keys off of birth projections to produce K-12 school enrollment projections, specifically for Kindergarten and 1st grades.

If there are changes to birth projections, there can be changes to K-12 enrollment projections.

Let’s take a quick look at current DOF birth projections for the entire state of California.

The DOF expects “...the number of births... to increase each year over the ten-year projection period compared to (2013) level.”

So, statewide births are expected to increase, what is expected for LA County?

There have been substantial changes in DOF projections for the County since their 2010 projection series.
DOF Birth Projections for LA County (2014 Series)

.4 % decline
Here is the DOF’s current projection for LA county.

Note that the number of actual LA County births have consistently declined for over a decade. This newest 2014 projection is projecting a very flat trajectory for the coming decade. They see a decline that is bolstered by a continuing decrease in TFR for LA County, which had already waned from 2.7 in 1990 to 1.8 by the year 2010.

We’ll soon see that this recent birth projection from the DOF shows is a very different outlook than in past years.

PD uses birth projections from the DOF, but does that projection for the County supply enough detail to project for births in LAUSD boundaries?
Proportion of LA County Births in LAUSD Boundary

Orientation of LA County, LAUSD, and surrounding counties
Slide Notes: Proportion of LA County Births in LAUSD Boundary

Because that LAUSD only serves part of the LA County & because no other agency produces birth projections for the LAUSD geography, MPD creates our own projections using a combination of individual birth records and LA County level projections from the DOF.

So, as the DOF County-wide birth projections change, so too can LAUSD’s birth and kindergarten projections.

Let’s next look at how changes in DOF birth projections have influenced changes in LAUSD birth projections.
Comparing DOF Birth Projections for LA County & LAUSD

Actual vs. Projected Births Over Time

- **LAUSD Births (2010)**
- **LAUSD Births (2011)**
- **LAUSD Births (2014)**
- **DOF L.A. County Births (2010 Series)**
- **DOF L.A. County Births (2011 Series)**
- **DOF L.A. County Births (2014 Series)**

Key Observations:
- **14.8% increase**
- **6.7% increase**
- **8.2% decline**

Comparison across different years and series, highlighting actual vs. projected birth rates.
**Slide Notes: Comparing DOF Birth Projections for LA County & LAUSD**

Here we see a sampling of previous birth projections from the DOF birth projections for the corresponding projection series. (chart A)

Notice that each of the earlier DOF birth projections had projected that the number of births would rebound in each of the first projected year.

Now with the 2014 series the trajectory is reversed.

When comparing the three projection series during the same (2009 to 2019) time period, we see that the most optimistic 2010 series, which projected a 14.8% increase in births, now in 2014, shows a reversal of trend by expecting a 8.2% decline.

This current trajectory seems more consistent with what we’ve known about LA County population dynamics; the county has declining birth and fertility trends, negative net domestic migration, and minor net positive international in-migration.

Here are LAUSD birth projections for the same years as the DOF projection series. (chart B)

For LAUSD, Big Changes in DOF birth projections at the County-level have produced Big Changes for SD’s own birth projections.

Now let’s see how the shifts in DOF birth projections could produce “Big Changes” in MPDs kindergarten enrollment projections 5 years later.
LAUSD Births to Kindergarten Enrollments
And here we are looking at the Changes in the LAUSD birth projections for the each of the past 5 years, along with MPDs current kindergarten projection.

Because the newest DOF projections were not available in time to use for MPD’s annual projection cycle, MPD used the previous DOF (2013) birth projections to key off of for kindergarten enrollments. Notice the DOF birth projection series plotted with MPD’s current Kindergarten enrollment projections (5-year offset) – the trends are more or less moving in parallel.

Notice that kindergarten enrollments have been increasing into post recession years.

Now that MPD has the 2014 birth projection series, we are evaluating Kindergarten projections for our upcoming annual projection cycle.

With this newest DOF projection (blue line), MPD’s kindergarten enrollments may need to be adjusted. If so, by how much? To answer this, MPD will use up-to-date data including actual enrollments, actual births, and programmatic data.
MPD K-12 Enrollment Projection for LAUSD (2014-15 Series)

- Actual
- Projected

3% decline
Slide Notes: MPD K-12 Enrollment Projection for LAUSD (2014-15 Series)

So, here again we are looking at the District projection to ask ourselves “Are Big Changes Ahead for the Los Angeles Unified School District?”

We could say that for total K-12 enrollments, not so Big Changes, except that rebounding enrollments are expected mid decade.

Now, with the new DOF birth projections, Bigger Changes may be in store for projected kindergarten enrollments.

Beyond producing enrollment projections, MPD continues to support the District by engaging in projects that explore the effects of District goals and operations on enrollments and capacities.

Currently, we are actively pursuing projects such as:

1) Exploring grade-to-grade progression among currently enrolled student cohorts, throughout their high school careers. MPD is looking at “high school tenure” and how that relates to A-G requirements, graduation rates, and facilities (e.g. supply and demand for seats);

2) Exploring characteristics of attendance boundaries that have larger percentages of students who attend their resident schools versus boundaries with fewer resident students enrolled;

3) Evaluating the degree of influence that new construction of facilities has had on student academic progress and enrollment patterns.

So, are Big Changes ahead for the LAUSD? For MPD- Always.
Conclusions

Current LAUSD projections don’t project big changes in total K-12 enrollments through the next decade. Slight enrollment declines are expected to continue with a slight rebound in enrollments.

Over the past few years big changes occurred in LAUSD birth projections, in part because of big changes in the DOF birth projections.

Changes to birth projections could mean that big changes are in store for Kindergarten enrollment projections.

Annually, MPD evaluates and incorporates new data to improve and revise it’s enrollment projections.

Big changes are always ahead for MPD. MPD is actively involved in supporting the District with projects that deliver timely data-driven analyses.