

# Forecasting K-12 Supply and Demand During An Era of Public Education Investment & Academic Improvement

Afternoon Roundtable Presentation  
USC/SCAG 25th Annual Demographic Workshop  
“DEMOGRAPHICS OF POVERTY AND PROGRESS AFTER THE RECESSION”

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June 9, 2014



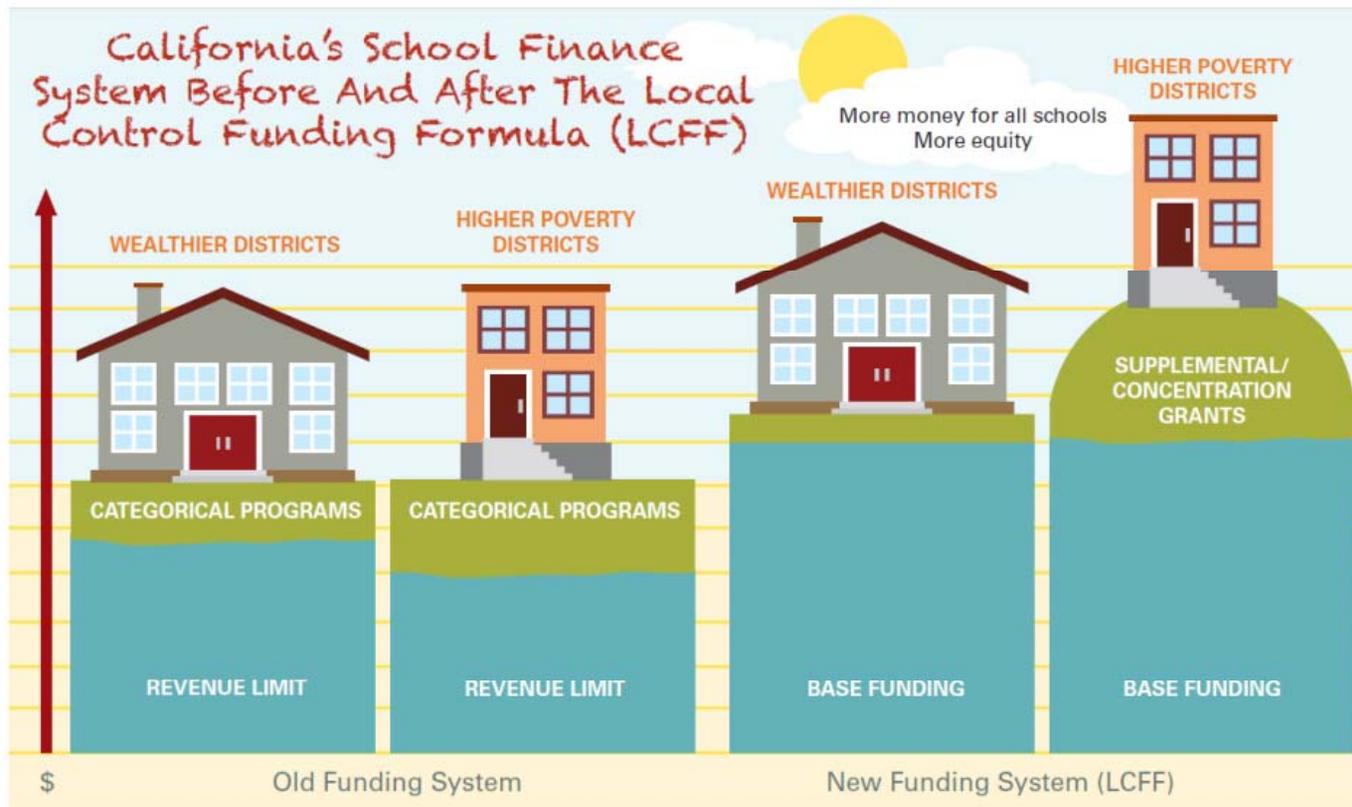
# ***Post-Recession Investment in Public Education Funding***

- Proposition 30 – 2012
  - Funding Sources: Income tax + State sales tax
  - ***Highest education funding increase in California history***
  
- Local Control Funding Formula (LCFF) – 2013
  - Targets “higher-needs” students
  - Minimum funding = SY 2007-08 levels
  - Local Education Agencies (LEAs) control spending
  - Local Control Accountability Plans (LCAPs) required

## ***Slide Notes: Post-Recession Investment in Public Education Funding***

- -The combination of passing Prop 30 in 2012, the Governor's financing reform of 2013, and restoring Prop 98 funding reductions & deferments is resulting in the highest increase ever proposed for educational funding in the history of Calif.
- Proposition 30 – Passed in 2012
  - Created larger funding pools for public education
    - Temporary tax increase for individuals earning +\$250,000 & Statewide sales tax increase
  - Will result in the highest increase in education funding ever proposed in the history of California
- Local Control Funding Formula (LCFF) – is the law as of 2013
  - The Formula equitably distributes funds and supports the education of students meeting specific criteria.
  - When fully implemented every District will receive at least as much funding as it did in School Year (SY) at least as much as from SY 2012-13.
  - Local Education Agencies (LEAs) have greater control of how funds are spent
  - Stakeholders must be engaged in the planning and oversight of how funds are spent
  - Developing a Local Control Accountability Plan (LCAP) is required for planning & oversight

# The Local Control Funding Formula



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***"Equal treatment for children in unequal situations is not justice."***

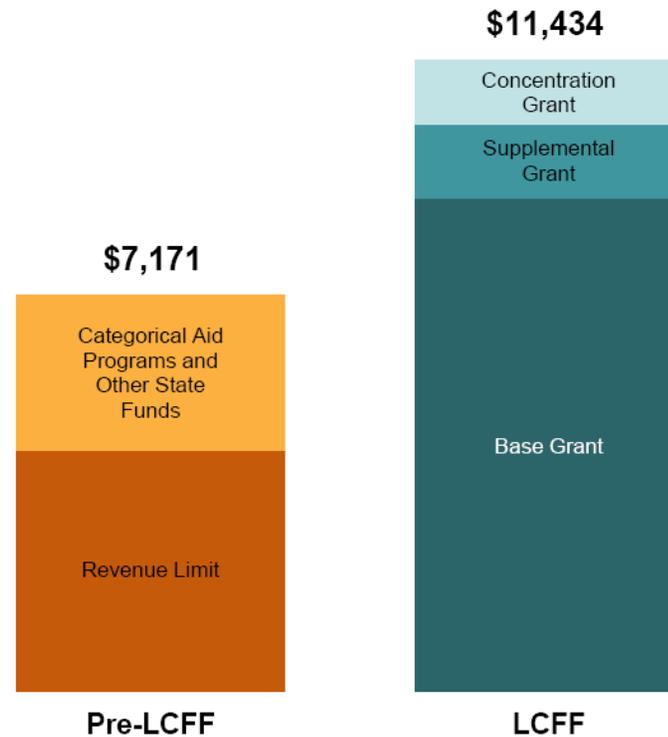
*– Governor Jerry Brown, January 2013 State of the State speech*

## ***Slide Notes: The Local Control Funding Formula***

- The main goal of the LCFF is to increase funding to make sure that every public school student is prepared to succeed in college and the workforce.
- The centerpiece of the Governor's education reform is the implementation of the Local Control Funding Formula (LCFF) (AB 97).
- The LCFF aims to increase funding to "higher needs" students who are eligible to receive free or reduced-price meals, classified as English Learners, foster youth, or any combination of these factors.
- OLD Funding System (left side of graphic) – categorical aid + revenue limit district received equal amounts of funding based on Prop 98 Revenue Limits. Additional funding was tied to specific types of categorical aid programs that restricted how funding was spent.
- NEW Funding System: Here's how it's different (right side of graphic) –
  - An overall higher amount of Base funding for all districts.
  - The LCFF is designed to more equitably fund and support the education of students with additional academic needs by channeling additional financial resources to them.
- LCFF funds generated through the supplemental and concentration grants must be spent to "increase or improve services" for high-needs students- and designed to be more flexible and more streamlined than the funding models that have been in place for decades.

# Sample Per-Pupil Funding for a High-Need California District

*(one that is 80% low-income, English language learner, and/or foster youth)*



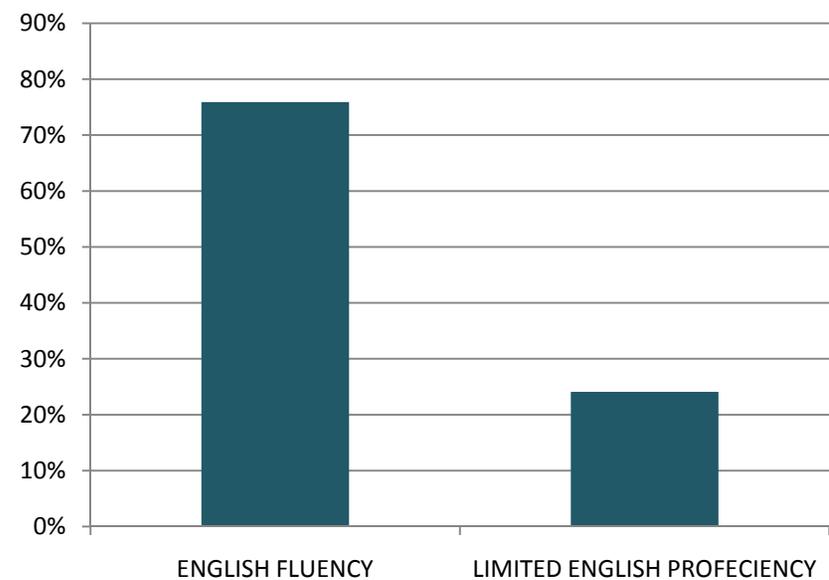
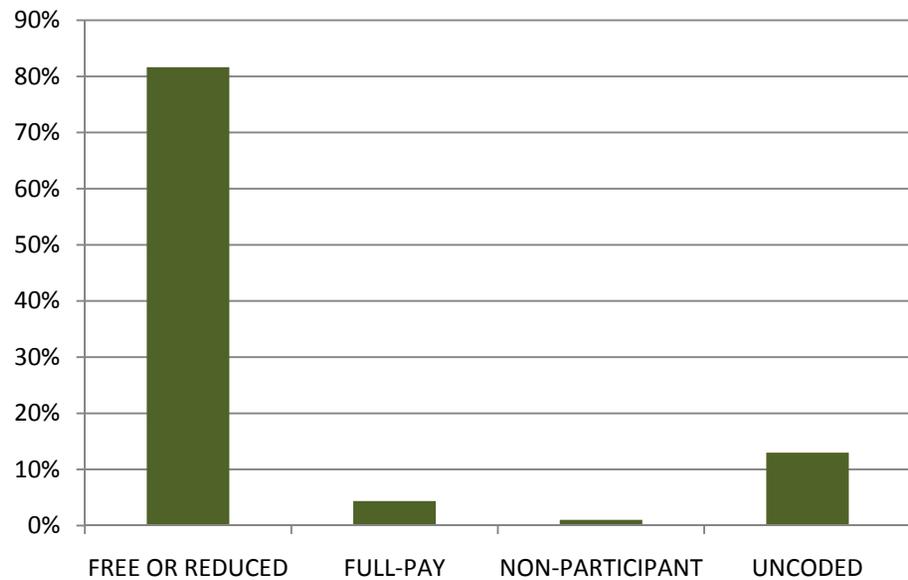
Note: These figures represent funding upon full implementation.

## ***Slide Notes: Sample Per-Pupil Funding for a High-Need California District***

- To help understand the impact, here is an example of a high-need CA district with 80% low-income, ESL and/or foster youth
- Differences in left (pre-LCFF) and right (LCFF) stacked bars
- Left = Prop 98 revenue limit & categorical aid - would amount to approx. \$7,000 per pupil.
- Right = Base Grant alone amounts to more than pre-LCFF funding.
- Plus Concentration & Supplemental grants amounts to approx. \$11,000 per pupil.
- Once fully implemented- High need districts could see 30% or more in additional per pupil funding.
  
- Will LAUSD benefit from the new funding model?
  
- -----
- As of July 2013 base grants (\$7,643 per ADA) will provide the bulk of funding to LEAs, with supplemental grants (+20% more funding for each student) and concentration grants (dist. W at least 55% of high-need students = additional 50% funding) providing more funding to LEAs with a greater percentage of “high-need” students.

## LCFF Funding Implications for LAUSD

- “Higher Needs” = free/reduced lunch, ESL, foster youth
- Over 85% of LAUSD students qualify as “Higher-Needs”
- LAUSD expected to add \$837m in SY 2014-15



*“We are...directing the money where the need and challenge is greatest.”*

– Governor Jerry Brown, July 2013

## **Slide Notes: LCFF Funding Implications for LAUSD**

Yes, LAUSD will benefit from the LCFF because:

- As the largest urban school district in the state LAUSD has a large percentage of students who qualify for additional LCFF funding.
- More than 85% of LAUSD students qualify as “higher-needs” students.

How LAUSD students qualify:

- % free or reduced lunches (income *130% or 185% of Federal Poverty Guidelines*), and;
- % of English Learners

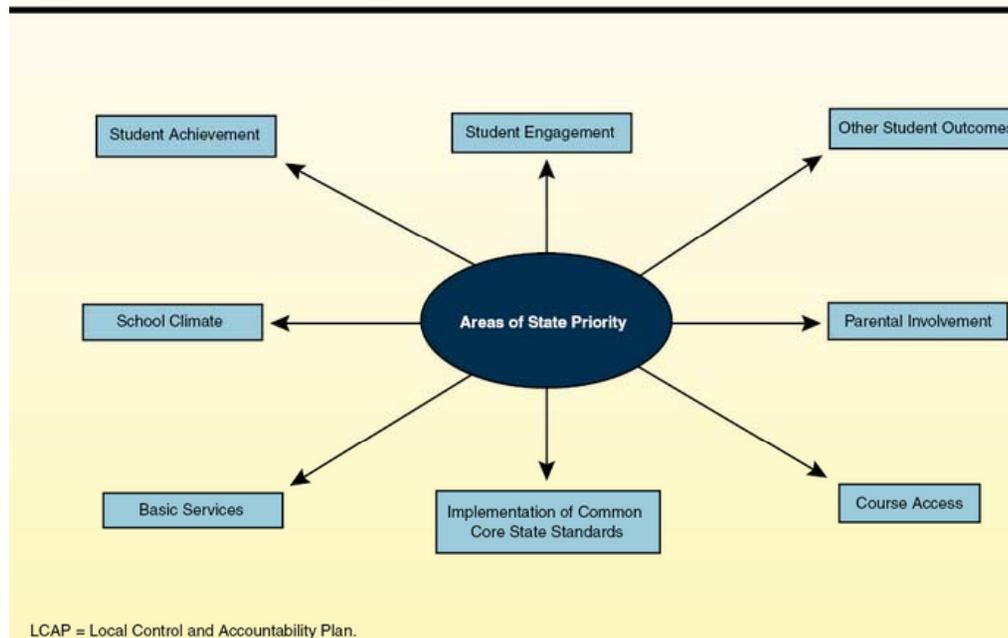
Because of LCFF, LAUSD is expected to add \$837 million in funding for SY 14-15.

- o Amounts to approx. 18% of general education budget & 12% of total LAUSD budget

## *The Local Control Accountability Plan*

- Each LEA must develop LCAP
- Each District decides how to address 8 priority areas
- LCAP must engage parents, students staff & community
- LAUSD developing own LCAP

### **Eight Areas of State Priority Must Be Addressed in LCAPs**



*“ We are bringing government closer to the people, to the classroom where real decisions are made...”*

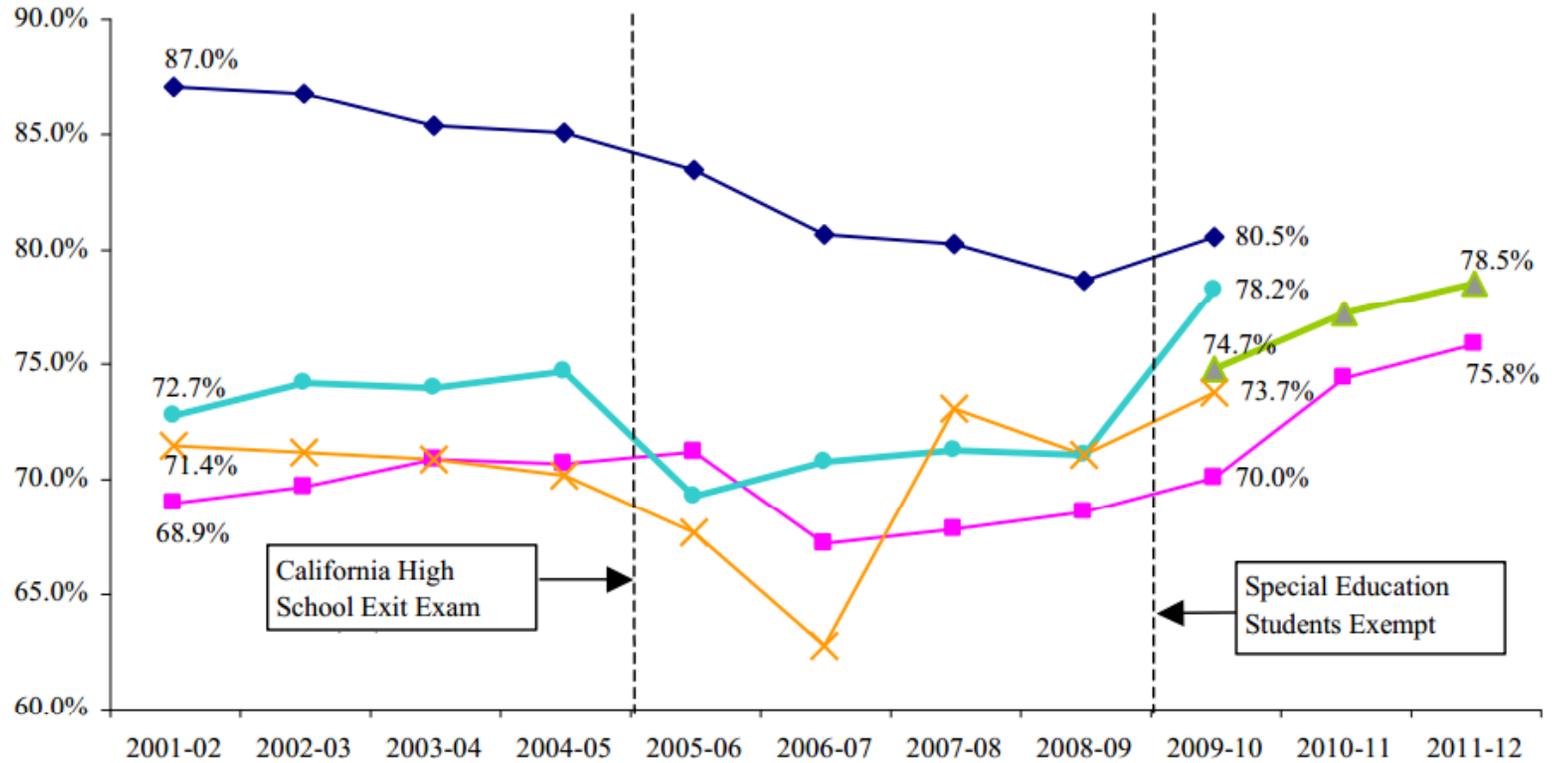
*– Governor Jerry Brown, July 2013*

## ***Slide Notes: The Local Control Accountability Plan***

- As part of the LCFF, each Local Education Agency (LEA) must develop a Local Control Accountability Plan (LCAP).
- A (LCAP) is a comprehensive planning tool based on eight priority areas that aim to address factors both inside and outside of the classroom.
- A core requirement of developing a (LCAP) is to engage parents, students, district staff, and community members.
- The plan must make sure District goals and actions are connected and ensure transparency in how the funds are spent.
- How to address the State's eight priority areas is left up to each District .
- -LAUSD is in the midst of developing it's own LCAP in time for the July 1<sup>st</sup> deadline.

# Academic Progress: CA Graduation Rates

California Graduation Rates, 2001-2 thru 2011-12



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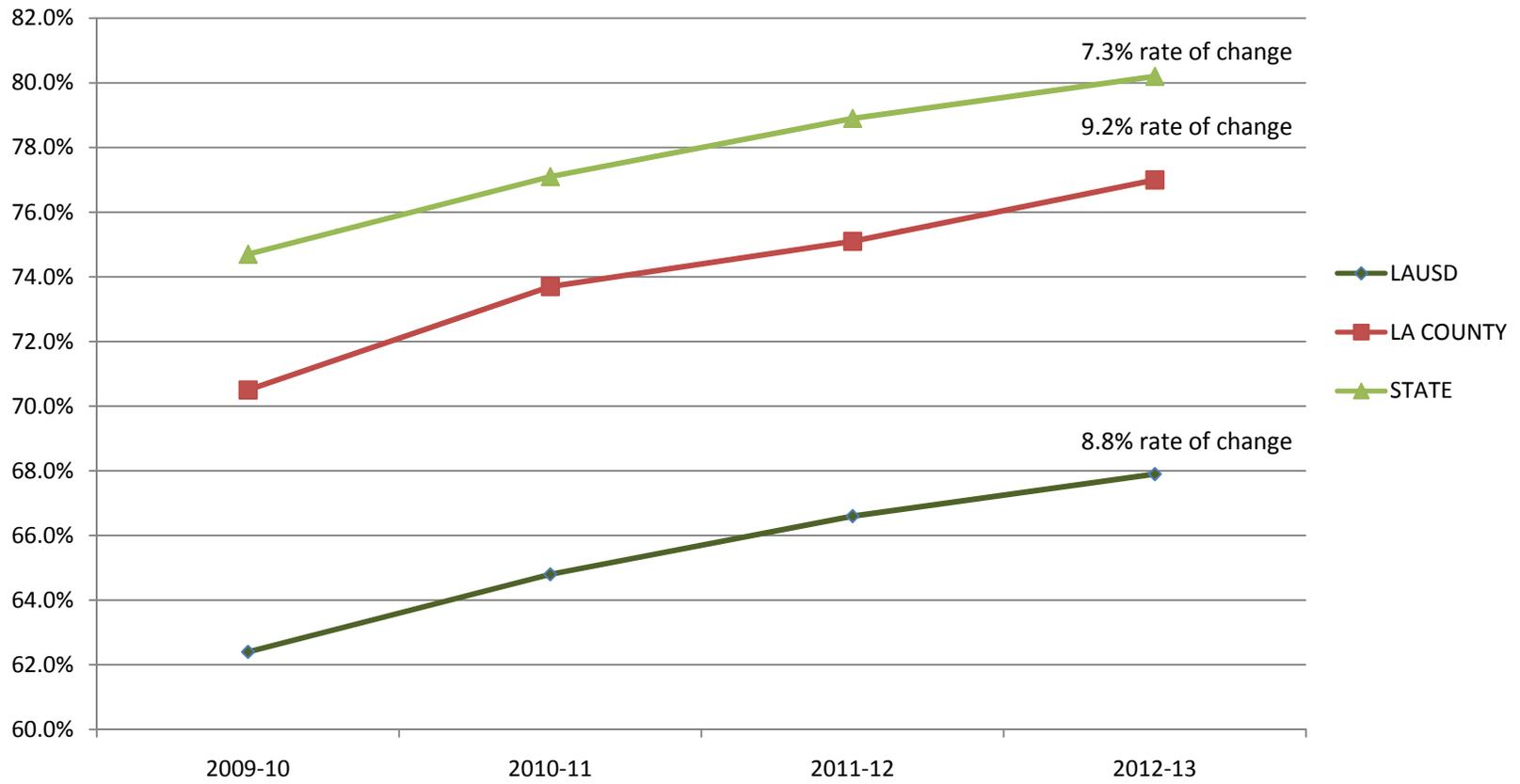
**“California’s high school graduation rate passes 80% for the first time”** – LA Times, April 28, 2014

## ***Slide Notes: Academic Progress: CA Graduation Rates***

- As mentioned, a main goal of the LCFF is to ensure that students succeed.
- Using graduation rates as a measure of 'success', we can see here that California has already been seeing a measure of success with a general upward trend in graduation rates, rising even through California's 'Great Recession' which was accompanied by deep funding cuts.
- Even when we look at varying methods used to measure graduation rates, there is general agreement of an increase in the percent of students graduating high school within 4- years (definition of 'graduate').
- By 2013 California's statewide high school graduation rates were above 80%, a first in California's history.

# Academic Progress: LAUSD Graduation Rates

## Graduation Rates SY 2009-10 through SY 2012-13 (CDE)



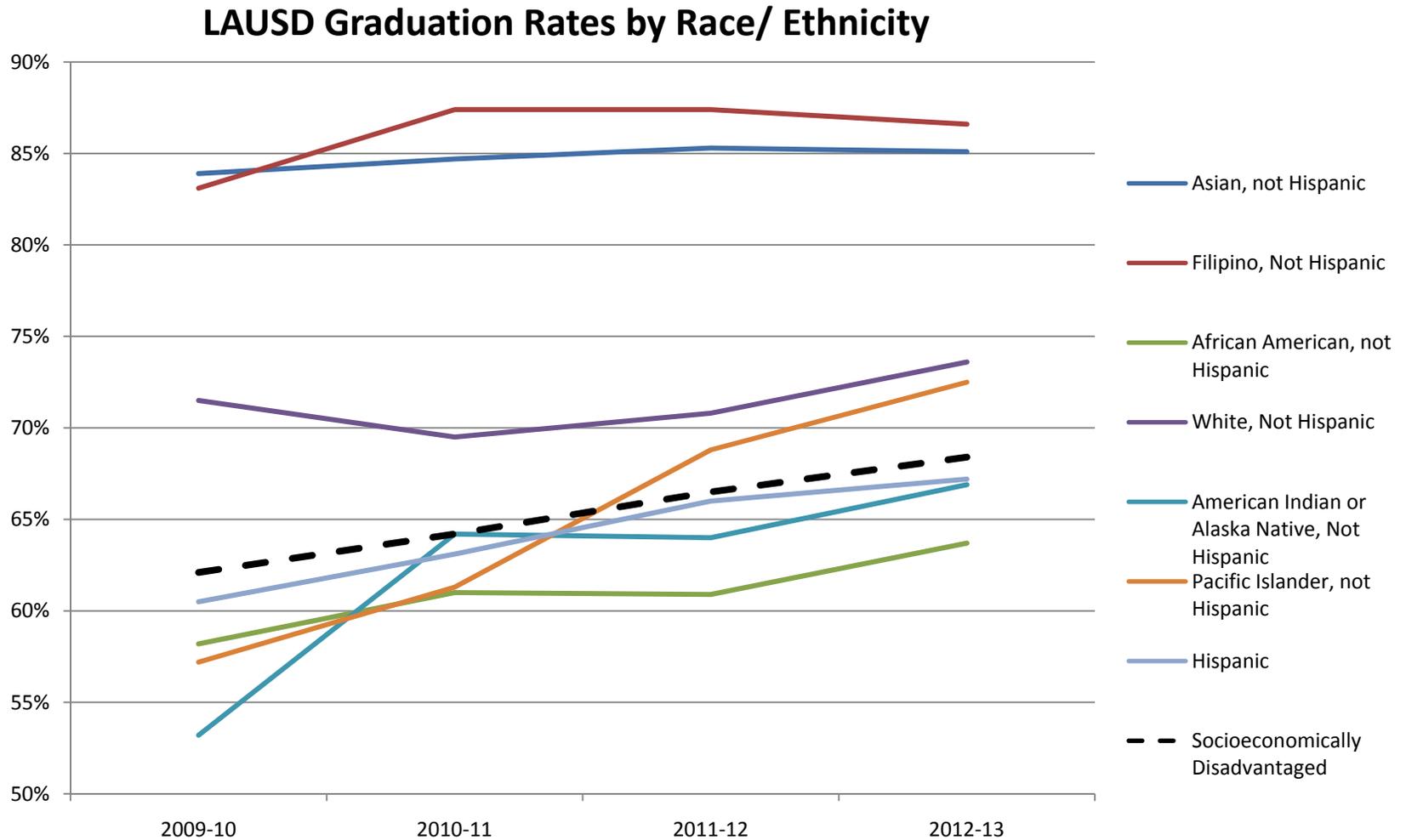
CDE 4-year adjusted cohort

***“These [LAUSD] results came at the absolute bottom of all cuts, and we still saw improvement” – LAUSD Supt. John Deasy***

## ***Slide Notes: Academic Progress: LAUSD Graduation Rates***

- LAUSD aims to build on it's continued success with the increased funding from the LCFF.
- 
- -LAUSD's grad rates (CDE 4-year adjusted rates) are trending up, along with the Statewide trend.
- -While LAUSD lags behind LA County and State in it's overall graduation rate, the District experienced a higher rate of change than the State since SY 2009-10.

# LAUSD Graduation Rates: High School Tenure



Does not include Special Education students.

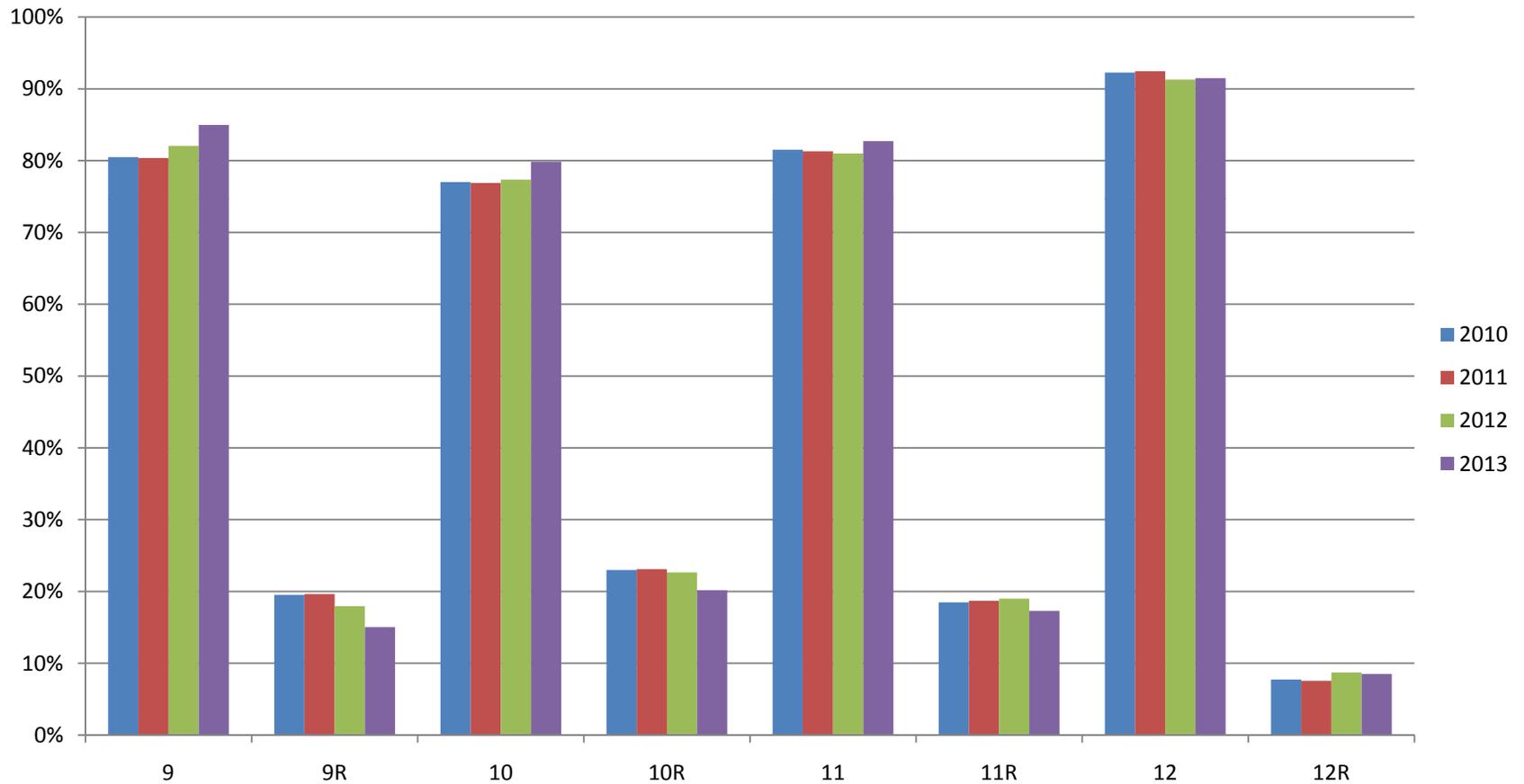
***“With improving graduation rates and fewer drop outs, will LAUSD need more seats?” – LAUSD Stakeholders***

***Slide Notes: LAUSD Graduation Rates: High School Tenure***  
***LAUSD Graduation Rates by Race/ Ethnicity***

- -Overall, LAUSD has seen improvement in graduation rates occurring among individual ethnic/race groups, too.
- However, not surprisingly, the improvement varies across race/ethnic dimensions- as well as across socio economic dimensions.
- While Latinos and African American students- many of whom live at or below the poverty line and/or are English Learners- are making gains, theirs are still among the lowest graduation rates in the District.
- It's disparities like these that the LCFF seeks to address.
- -While graduation rates are a typical way of looking at academic progress, MPD is exploring student cohorts and their grade-to-grade progression throughout their high school careers, not just at the starting and ending points. In other words looking at their "high school tenure".

# LAUSD Graduation Rates: High School Tenure

## Students Repeating Grade during the Current School Year SY 1011 - SY 1314 (%)



Does not include Special Education students.

***“With improving graduation rates and fewer drop outs, will LAUSD need more seats?” – LAUSD Stakeholders***

## **Slide Notes: LAUSD Graduation Rates: High School Tenure Students Repeating Grade during the Current School Year**

- One way to understand tenure and academic progress is to look at how many students are “repeaters”, having repeated a grade at some point in their high school career.

(Typically, methods for calculating graduation rates don’t specifically account for these students and their affect on rates).

Notice that among LAUSD students, while there are continue to be a significant percentage of students who repeat grades, the general trend is for fewer students to repeat a grade.

### ***What is gained by looking at repeaters?***

By looking at patterns among cohorts of high school students progressing grade-to-grade MPD can better advise on how changes in enrollment patterns can affect future graduation rates and drop out rates which can affect short & long range supply (seats) and demand (enrollments).

### ***What can these types of trends tell us?***

- 1) For Capital planning – HS tenure trends can help answer questions such as “as graduation rates improve will LAUSD need more seats?”

If fewer students are repeating grades, and at the same time fewer students are dropping out and staying enrolled to graduate, won’t there be overcrowding because more students are streaming through high school and need seats?

At the surface it may seem as though there *would* be overcrowding- fewer students leaving as drop outs, staying enrolled and graduating means more students enrolled and an increase in the number of students needing seats, right?

Well, the dynamic may not be that simple.

What if the increase in the number of students exiting the system (graduating) exceeds the number of students staying in the system (NOT dropping out)? Would supply outpace demand?

What if at the same time smaller class sizes are required resulting in fewer students per classroom?

By examining students tenure through the grades, how many ‘repeaters’ for example, MPD is able to evaluate current streams of students (entering, repeating, exiting) and forecast future enrollment streams in order to model relationships between supply & demand and graduation and drop out rates.

Shifting trends in students repeating a grade for 1yr versus 2yr versus 3yrs can be factored into a model that forecasts streams students through high school.

- In conjunction with this type of investigation :

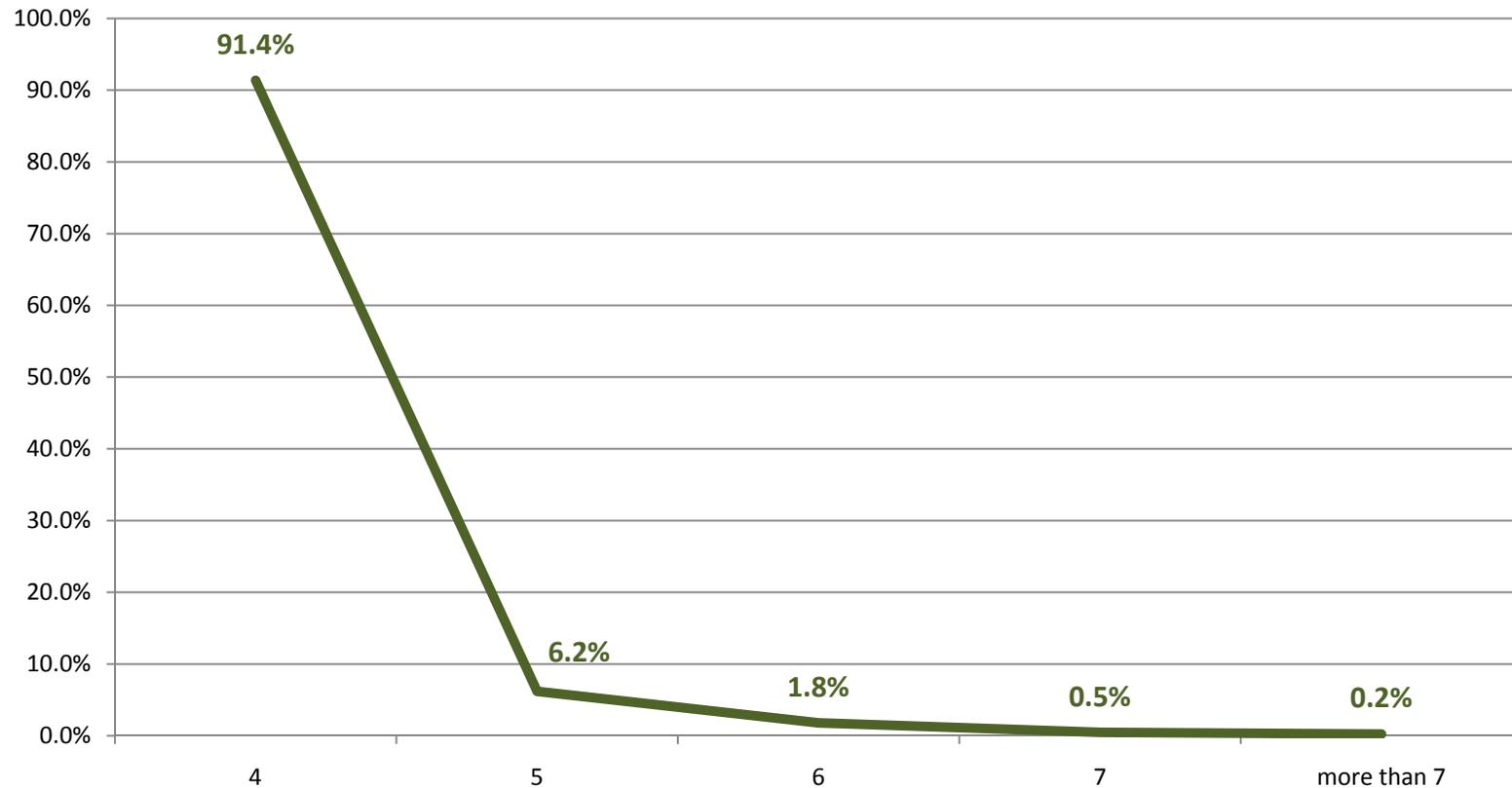
- 2) MPD can also use it for year-to-year enrollment planning.

For example, forecasting how many 9<sup>th</sup> grade “repeaters” will enroll in an upcoming school year helps school staff to understand the dynamics of their year to year enrollment patterns as well as assist in planning for a total number of 9<sup>th</sup> grade students- repeaters and non-repeaters.

**-Now, let’s take a look specifically at the tenure of this year’s 12<sup>th</sup> graders to see how that can be useful for school operations.**

# LAUSD High School Tenure: 12<sup>th</sup> Grade Cohort

How Many Years Have 12th Graders been Enrolled in High School?  
(SY 13-14) %



Does not include Special Education students.

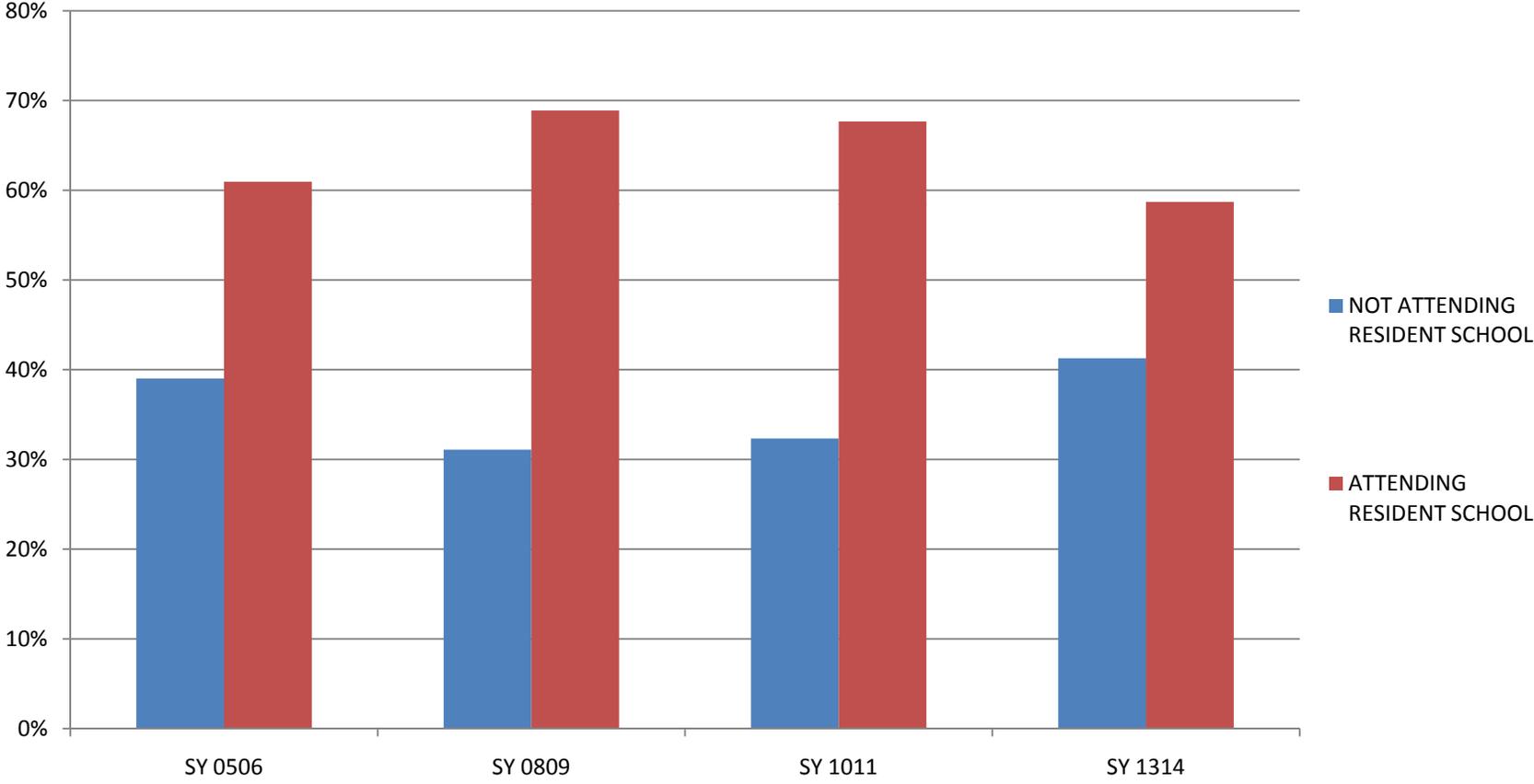
*"The [State] is...examining whether to use five-and six-year graduation rates..."* – California State Auditor High School Graduation Report, 2012

## **Slide Notes: LAUSD High School Tenure: 12<sup>th</sup> Grade Cohort**

- **Why is it worthwhile to explore HS tenure among 12<sup>th</sup> graders?**
- As it relates to supply & demand, knowing how many years 12<sup>th</sup> graders have been enrolled helps us to talk about the number of seats needed for, not only students who are 'on track' to graduate but also those who need additional time to complete high school.
- Related to graduation and drop out rates, paying attention to those students who need more than 4 years to complete high school, beyond the State's official requirement for graduation, helps with conversations about measuring academic progress.
- -Notice that by looking at HS tenure, we see that the vast majority of 12<sup>th</sup> graders (91.4%) have been enrolled in high school for 4 years. These are students who are currently 'on track' to graduate within California's 4-year graduation timeframe.
- -However, notice the percentage of 12<sup>th</sup> graders who have had a high school tenure of 5 years, meaning they've repeated a grade at some point. 6.2% of 12<sup>th</sup> graders are in a 5<sup>th</sup> year of high school.
  - If we add the 4-year & 5-year 12<sup>th</sup> graders together, it amounts to 97.6% of 12<sup>th</sup> current graders.
  - What if we added 6-year 12<sup>th</sup> graders – now we've accounted for to 99.4% of all 12<sup>th</sup> graders.
- Considering that over 99% of 12<sup>th</sup> graders have a 4-6 year high school tenure, does it make sense for official statistics to only recognize students who will graduate within 4years?
- At this point, California school districts never gets credit for these 5<sup>th</sup> & 6<sup>th</sup> year graduates in official graduation rates, nor in order to demonstrate that schools are meeting AYP (Adequate Yearly Progress) goals related NCLB & high school graduation.
- Yet, there are "completers" in this group.
- Now let's ask a core MPD question – what affect would including 5<sup>th</sup> & 6<sup>th</sup>-year high schoolers in official statistics have on LAUSD's supply (number of seats) and demand (enrollment)?
- Well, it's actually a trick question. A change to officially reported rates, and not to the actual number of students enrolled in high school has no affect on demand for seats.
- The 5 & 6-year students are already enrolled & accounted for, whether or not they are included in official grad rates doesn't change the fact that they are enrolled and need seats.
- Another avenue of investigation MPD is pursuing is to look at HS tenure as it relates to characteristics of students attending resident schools.**

# LAUSD High School Tenure: Resident School

## Repeating A Grade: Attending the Resident School?



Does not include Special Education students.

*“What’s happening at the neighborhood school?”* –MPD planning question

## ***Slide Notes: LAUSD High School Tenure: Resident School***

The District underwent a massive decade long building program, which relieved overcrowding, re-instated single-track calendars, and opened up space for students to attend their “home” schools.

New high schools were built in neighborhoods throughout the District.

MPD is beginning to use HS tenure as a way to evaluate this capital project and explore how new schools have affected academic progress of students who enrolled in their resident schools.

Looking at high school enrollment of students who have repeated a grade, one can see that a majority of repeaters are enrolled in their resident schools.

### ***What can be revealed by studying characteristics of resident/ non-resident ‘repeaters’?***

MPD is beginning to explore HS tenure among students living in areas that have had new schools built:

- 1) We are starting to look at case studies of existing schools where overcrowding was relieved by new school(s). What changes do we see in HS tenure among students enrolled in the existing school? What of students enrolled in the new school?
- 2) Has the building of new schools influenced academic progress, as measured by HS tenure and grad rates? Can we see measurable progress by looking at tenure? For example, are there fewer 9<sup>th</sup> grade repeaters?
- 4) What are characteristics of resident schools that have high graduation & low drop out rates ? Are there fewer students choosing to attend other non resident schools? Is there a difference in supply & demand?

By revealing details about high school tenure that are otherwise obscured by considering graduation and drop out rates alone, MPD is helping to ensure that LAUSD’s capital planning efforts are bolstered by data-driven analysis.

## *Conclusions*

The creation of the LCFF seeks to deliver a more equal education to all of California's youth .

The LCFF addresses many of the flaws of the state's prior K–12 funding system.

The LCFF requires local community engagement to develop plans for how funding is spent and guarantee greater transparency for reaching goals and monitoring progress.

MPD is supporting LCFF goals by providing data-driven analysis of academic progress (defined by high school tenure), including it's relationship to future supply (classroom seats) and demand (number of students enrolled).

*LAUSD: All youth Achieving*

