APPENDICES

Appendix A – Rate Calculations and Reasons for Using Census Enrollment

This report includes three metrics of discipline expressed as rates:

1. Rate of Lost Instruction: This is the days of lost instruction due to out-of-school suspension (OSS) per 100 students enrolled.
2. Rate of Suspensions: This is the number of in and out-of-school suspensions per 100 students enrolled.
3. Student Expulsion Rate: This is the (unduplicated count) students expelled per 100 enrolled.

Each of these rates is calculated using the following formula:

$$\frac{\text{Raw Count}}{\text{Census Enrollment}} \times 100$$

This yields a comparable rate of the discipline metric, either lost instruction, suspensions, or the number of students expelled. In each case, dividing by the enrollment allows one to compare rates between student groups and academic years because it produces rates that account for differences in enrollment size.

Rate of Lost Instruction Per 100: This report used the raw count of days absent due to being suspended out-of-school, which are found only in the Absenteeism Downloadable Data Files. Note, for the statewide race breakdowns for students in the foster system, youth experiencing homelessness, and students with disabilities in Figures 2-4, this report first imputed the raw count of days absent due to OSS because CDE does not make those raw data available. DataQuest provided the information needed to do this imputation. For this report, calculating the count of days lost began by using the number of students with one or more absences, average days absent, and the percentage of OSS absences provided by DataQuest's Absenteeism Data Report.

For example, to calculate the rate of lost instruction for African American youth in the foster system for 23-24, this report first multiplied the number of students with one or more absences, which was 6,200, with their average days absent, which was 21.1. This calculation produced their total count of days absent, which was 130,820. We then multiplied the total days absent by their reported percentage of days absent due to OSS, which was 4.8%. The equation in this example was 130,820 x 0.048. This equation produced the raw count of days absent due to OSS for African American students in the foster system for 23-24, which was 6,279. This raw count was then plugged into the equation above to calculate their rate of lost instruction.

The Rate of Suspensions and the Rate of Students Expelled Per 100: The data relied upon the raw data from the Discipline Downloadable Data Files and Suspension and Expulsion Data Report from DataQuest.

Census Enrollment: This report uses census enrollment as the denominator for all the rate calculations. The CDE defines the census enrollment as "a single-day snapshot of the total number of TK/K-12 students enrolled on Census Day, the first Wednesday in October." The census data used here were obtained from the CDE's Annual Enrollment Downloadable Files and Annual Enrollment Data Report on DataQuest. The census data are what CDE reports to the public under the heading "enrollment." Census enrollment provides the public with consistent information of how many children are served by each school and district.

The CDE uses the cumulative enrollment in calculating their rate of unduplicated number of students suspended for the California Data Dashboard as well as for the rates reported to the public on DataQuest. This report uses the census enrollment for several reasons outlined below:

1. These census data are used as the basis for many aspects of accountability and public reporting, ranging from calculating teacher-student ratios, class size, per-pupil expenditure and rates of proficiency.
2. Their multiple use for reporting and funding means the official census enrollment data receive greater scrutiny than the cumulative enrollment data and are more easily verified.
3. The census data can be easily aggregated to determine the district enrollment. This is not possible to do with the cumulative enrollment.
4. The annual average daily attendance is typically lower than the census enrollment.

In addition, the U.S. Department of Education's Office for Civil Rights uses census enrollment for all calculations when they report on suspension and expulsion rates, as well as for determining per-pupil expenditures. The fact that nearly identical data are consistently collected and reported independently by the federal government make it easier to detect large data errors in reporting, and easier to compare the California's state and district rates to the state and district reporting in other states.

There are also reasons not to use cumulative data for calculating discipline rates.

1. Cumulative enrollment has been shown to become inflated the second half of the year as new students come in and others dropout or are disenrolled. Meanwhile all the students who dropped out, even those who are enrolled for just one day, still count. Because they only attend for part of the year, students who dropout early in the school year, and those who enroll near the end of the year are less likely to contribute to the count of days of lost instruction. Further, students that have been suspended (including in prior years) are more likely to dropout. The net effect is that in some districts with high dropout rates, and with many short-term enrolled students such as highly mobile students, the cumulative enrollment can be double or triple the census enrollment. This phenomenon is most often observed for the student groups most frequently suspended, such as students with disabilities, youth in the foster system, and students experiencing homelessness. This means that cumulative enrollment deflates suspension rates more for the students with the highest suspension rates. It also means that the use of cumulative enrollment can be used to artificially deflate discipline rates, and observed disparities.

2. Some districts may try to "game the system" by disenrolling students who are struggling to avoid accountability, such as in academic proficiency measures and for calculating graduation rates or rates of chronic absenteeism which are also indicators in the statewide accountability system. Moreover, although a student enrolled for just one day would not be included when calculating absenteeism or graduation rates, they would be included for the purpose of calculating student suspension rates for accountability for discipline performance levels.

The fairest enrollment count would be calibrated by length of time enrolled so that a student who was only enrolled for the last quarter would only count as a quarter of an enrolled student.

Note about students with disabilities attending non-public school (NPS) and enrollment: This report conducted analyses at the state and district levels. Both the census and the cumulative enrollment Downloadable Data Files, and Dataquest's reports, include the enrollment of students with disabilities attending non-public schools. At the state level in 23-24, the total count of these students numbered less than 8,500 and 1.1% of all students with disabilities. The inclusion of the NPS student enrollment and corresponding discipline outcomes was determined to have no significant impact on any of the suspension rates presented in this report. The same is true for all rates presented in the. However, readers should note that the student suspension rates calculated for use by CDE in their California School Dashboard do not include the NPS students with disabilities.

Appendix B – Suspensions Broken Down by Offense Categories

This report relied upon the the count of suspensions data from the CDE's Discipline Downloadable Data Files. The suspensions count represents the number of suspensions that are meted out, and even if the same student receives multiple suspensions, each suspension is included in the total count.

The CDE does disaggregate the count of suspensions that are meted out for six offense categories, which each offense category includes numerous CA Education Code sections (https://www.cde.ca.gov/ds/ad/fssd.asp). Below are the offense categories that the CDE disaggregates suspension counts by:

Violent Incident (Injury)

- Sexual Battery/Assault: 48915(c)(4), 48900(n)
- Caused Physical Injury: 48915(a)(1)(A)
- Committed Assault or Battery on a School Employee: 48915(a)(1)(E)
- Used Force or Violence: 48900(a)(2)
- Committed an act of Hate Violence: 48900.3
- Hazing: 48900(q)

Violent Incident (No Injury)

- Sexual Harassment: 48900.2
- Caused, Attempted, or Threatened Physical Injury: 48900(a)(1)
- Aided or Abetted Physical Injury: 48900(t)
- Harassment or Intimidation: 48900.4
- Harassment, Intimidation of a Witness: 48900(o)
- Made Terrorist Threats: 48900.7
- Obscene Acts, Profanity, and Vulgarity: 48900(i)
- Bullying: 48900(r)

Weapons Possession

- Possession, Sale, Furnishing a Firearm: 48915(c)(1)
- Possession, Sale, Furnishing a Firearm or Knife: 48900(b)
- Brandishing a Knife: 48915(c)(2)
- Possession of a Knife or Dangerous Object: 48915(a)(1)(B)
- Possession of an Explosive: 48915(c)(5)

Illicit-Drug Related

- Sale of Controlled Substance: 48915(c)(3)
- Possession of Controlled Substance: 48915(a)(1)(C)
- Possession, Use, Sale, or Furnishing a Controlled Substance, Alcohol, Intoxicant: 48900(c)
- Offering, Arranging, or Negotiating Sale of Controlled Substances, Alcohol, Intoxicants: 48900(d)
- Offering, Arranging, or Negotiating Sale of Drug Paraphernalia: 48900(j)
- Offering, Arranging, or Negotiating Sale of Soma: 48900(p)

Defiance-Only

- Disruption, Defiance: 48900(k)(1)

Other Reasons

- Possession of an Imitation Firearm: 48900(m)
- Possession or Use of Tobacco Products: 48900(h)
- Property Damage: 48900(f)
- Robbery or Extortion: 48915(a)(1)(D)
- Property Theft: 48900(g)
- Received Stolen Property: 48900(l)

This count of suspensions should not be confused with the unduplicated number of students who are suspended, which is the metric used by CDE for the performance level and color coding on the accountability dashboard. The student suspension rate used by CDE in their dashboard is based on the count of students suspended at least once (in-school or out-of-school) and it also uses cumulative enrollment to calculate the rates. Further, in order to be counted for CDE's performance level, students must have been suspended for at least one full day. At least one full day can be based on the aggregate of partial day suspensions. The unduplicated count of students suspended used in the performance coding considers both in-school and out-of-school suspensions. The Tableau webtool that accompanies this report includes an unduplicated student suspension rate in the last tab, but it includes students who were suspended for less than a full day and the rate is based on census enrollment.

Appendix C – Selection Process of Districts Making Progress

For the purposes of this report, the selection process included several steps to identify the districts that were deemed to be making progress in Table 1. The selection process used the rate of lost instruction due to OSS as the primary metric in selecting these districts. However, several additional data sources were used to further limit the selection.

The first wave in the selection process was conducted based on the data thru the 2022-23 academic year and used the following the criteria for inclusion:

- Enrollment for Black students for all years was ≥ 100
- Enrollment students with disabilities for all years was ≥ 100
- Change in the rate of lost instruction for Black students from 17-18 to 22-23 decreased (change value was negative)
- Change in the rate of lost instruction for students with disabilities from 17-18 to 22-23 decreased (change value was negative)
- Was not a County Office of Education or elementary school district

The following set of criteria for exclusion was also applied:

- Lost instruction rate for either students with disabilities or Black students in 2022-2023 was deemed to be a "high" rate despite decreases.

Based on our standard deviation analysis for all students, (See Appendix D) a lost instruction rate of 23 days lost per 100 students in 22-23 was identified deemed to be a "high rate" for that year.

The final selection process was completed after the data for the 2023-2024 school year were released. Merced Union High was almost excluded based on higher student expulsion rates for Black, Latinx, and White students, and students with disabilities, but the expulsion rates for each of these student groups decreased in 2023-24.

A number of districts were eliminated because were unable to schedule interviews within a specific time frame. Ultimately, only Merced Union High is featured in this report because, besides meeting the statistical thresholds, their district leaders candidly explained their reform efforts with clarity.

In addition to the description of the reform efforts by Merced Union High, West Covina Unified was added to Table 1 in order to call attention to the fact that their rates of lost instruction and suspensions for Black, Latinx, and White students and students with disabilities were consistently low and yet had also declined fairly consistently, including a noticeable decrease in 2023-24. West Covina's graduation rates also improved for these student groups and their chronic absenteeism rates either decreased or were comparable to or below the state's rates across the academic years from 17-18 to 22-23.

Appendix D – Standard Deviation Analysis

This report identified a lost instruction rate of 23 for 2022-23 and 21 for 2023-24 as benchmarks for districts having a high rate of lost instruction. These high benchmark rates were arrived at based on a standard deviation analysis of the district-level data.

Only selected districts that met the criteria listed below were included in the analyses.

- Did not have missing or suppressed data on the raw count of days absent due to OSS for the "All Students" group
- Had Black enrollment > 4
- Was not a County Office of Education

For 2022-23, 630 districts met these criteria, and for 2023-24, 634 districts met these criteria.

The standard deviation and mean values of the "All Students" group's lost instruction rate was calculated across all the selected districts. In 2022-23, the standard deviation was 11.0 and the average was 12.2. Therefore this report designated any rate of 23 or greater to be "high" for 22-23. In 2023-24, the standard deviation was 10.4 and the average was 11.0. We added the standard deviation and average to yield our one standard deviation above the mean rate of lost instruction. This meant that 21 was deemed to be "high" for the rate of lost instruction for 2023-24.

Standard deviation is used to get a sense of the spread or variability of data, and it is also widely used to gauge which data points may be considered high or low in a sample. A case with a value that is +1 standard deviation above the average is typically higher than 84% of cases in the population. Thus, we could expect that a district with a lost instruction rate for its "All Students" group that is +1 SD above the average will be higher than approximately 84% of other districts in CA.