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Superior Court of California
County of Fresno
By: J. Nelson, Deputy

5 Attorneys for **Cross-Complainants Immanuel Schools,**
6 **Ryan Wood, Matt Zulim, and Greg Jackson**

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8 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
9 **FOR THE COUNTY OF FRESNO**

10 COUNTY OF FRESNO through JEAN M,
11 ROUSSEAU, in his official capacity as
Emergency Services Director and County
12 Administrative Officer

13 Plaintiff,

14 v.

15 IMMANUEL SCHOOLS., a California non-
profit corporation; RYAN WOOD, Chief
16 Executive Officer of Immanuel Schools and
DOES 1 through 50, inclusive,

17 Defendants.

Case No.: 20CECG02447

**VERIFIED CROSS-COMPLAINT FOR
A VIOLATION OF THE EQUAL
PROTECTION CLAUSE OF THE
CALIFORNIA CONSTITUTION; FOR A
VIOLATION OF THE CONTRACTS
CLAUSE OF THE CALIFORNIA
CONSTITUTION; FOR A VIOLATION
OF THE FOURTEENTH AMENDMENT
OF THE U.S. CONSTITUTION; AND
DECLARATORY AND INJUNCTIVE
RELIEF**

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19 IMMANUEL SCHOOLS, a California non-
profit Corporation; RYAN WOOD, Chief
20 Executive Officer of Immanuel Schools;
MATT ZULIM, an individual; and GREG
21 JACKSON, an individual

22 Cross-Complainants,

23 v.

24 COUNTY OF FRESNO, through JEAN M.
25 ROUSSEAU in his official capacity; JEAN M.
ROUSSEAU in his official capacity as the
26 Emergency Services Director and County
Administrative Officer; RAIS VOHRA, in his
27 official capacity as the Interim Health Officer
of Fresno County; GAVIN NEWSOM, in his
28 official capacity as the Governor of California;
SANDRA SHEWRY, in her official capacity

1 as the State Public Health Officer and
2 Department of Public Health Director;
and ROES 1 through 50, inclusive

3 Cross-Defendants.
4

5 **TO EACH PARTY AND ITS ATTORNEY OF RECORD:** Cross-Complainants
6 Immanuel Schools, Ryan Wood, Matt Zulim and Greg Jackson bring this cross-complaint and allege
7 and show the Court as follows:

8 **PARTIES**

9 1. Immanuel Schools (“Immanuel”) is a non-profit California corporation operating a
10 K-12 private school located at 1128 S. Reed Avenue, Reedley CA 93654 in the County of Fresno.
11 Approximately 605 students attend Immanuel.

12 2. Ryan Wood is the Chief Executive Officer and Superintendent of Immanuel Schools.
13 (Immanuel Schools and Ryan Wood are hereinafter collectively referred to as “Immanuel” or
14 “Cross-Complainants”).

15 3. Matt Zulim is an individual and parent of a student at Immanuel Schools. Matt Zulim
16 resides in the County of Fresno, State of California.

17 4. Greg Jackson is an individual and parent of 1st, 3rd, and 6th grade students at
18 Immanuel Schools. Greg Jackson resides in the County of Fresno, State of California.

19 5. Cross-Defendant Jean M. Rousseau (“Rousseau”) is the duly appointed Emergency
20 Services Director and County Administrative Officer of the County of Fresno. As Emergency
21 Services Director and County Administrative Officer, Rousseau is empowered by Fresno Ordinance
22 Code § 2.44.060 and the Charter of the County of Fresno to sue in the name of the County to enforce
23 County ordinances, orders or regulations.

24 6. Cross-Defendant Dr. Rais Vohra (“Dr. Vohra”) is the duly appointed Interim Health
25 Officer of the County of Fresno, and a physician licensed to practice in the State of California.

26 7. Cross-Defendant Gavin Newsom (“Governor Newsom”) is made a party to this
27 Action in his official capacity as the Governor of California. The California Constitution vests the
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1 “supreme executive power of the State” in the Governor, who “shall see that the law is faithfully
2 executed.” Cal. Const. Art. V, § 1. See, e.g., *Ex Parte Young*, 209 U.S. 123 (1908).

3 8. Cross-Defendant Xavier Becerra (“Becerra”) is made a party to this Action in his
4 official capacity as the Attorney General of California. Under California law, Becerra is the chief
5 law enforcement officer in the State. Cal. Const. Art. V, § 13.

6 9. Cross-Defendant Sandra Shewry (“Shewry”) is made a party to this Action in her
7 official capacity as State Public Health Officer and Acting Director of the California Department of
8 Public Health (“CDPH”).

9 10. Cross-Defendants DOES 1 through 100, inclusive, are sued herein under fictitious
10 names. Their true names and capacities are unknown to Cross-Complainants. When their true
11 names and capacities are ascertained, Cross-Complainants Complaint by inserting their true names
12 and capacities herein.

13 11. Cross-Complainants are informed and believe and thereon allege, that each of the
14 fictitiously named defendants is responsible in some manner for the occurrences herein alleged, and
15 that Cross-Complainant’s damages as herein alleged were proximately caused by those cross-
16 defendants.

17 12. Cross-Complainants are informed and believe and thereon allege that at all times
18 herein mentioned, defendants DOES 1 through 100 were agents, servants, and employees of their
19 codefendants, and in doing the things hereinafter alleged were acting in the scope of their authority
20 as agents, servants, and employees, and with the permission and consent of their codefendants.

21 **JURISDICTION AND VENUE**

22 13. This is a civil action for violation of the constitutional right to education, violation
23 of the contracts clause of the California Constitution, and an overbreadth claim is brought under the
24 laws of the State of California, which this court has subject matter jurisdiction over pursuant to
25 *California Code of Civil Procedure* section 410.10.

26 14. Personal jurisdiction is proper in this court because all Cross-Defendants have
27 engaged in business in the State of California as employees or elected officials of the State of
28 California. Cross-Complaints are informed, believe, and thereupon allege that all Cross-Defendants

1 reside in the State of California. This action arises out of business conducted in California by all
2 defendants and relates to the operation of a school in the County of Fresno, California.

3 15. Jurisdiction and venue are proper in the Superior Court, State of California, County
4 of Fresno, because this judicial district is where the school at issue is located.

5 **STATEMENT OF FACTS**

6 16. On or about March 4, 2020 Governor Newsom declared a State of Emergency
7 throughout the State of California due to the coronavirus pandemic.

8 17. On or about March 15, 2020, Mr. Rousseau, the emergency Services director for the
9 County of Fresno, issued a declaration of local emergency for the County of Fresno. (Exhibit 39.)

10 18. On or about March 17, 2020, the Fresno County Board of Supervisors ratified the
11 declarations of the County Health Officer and Emergency Services Director and declared a public
12 and health emergency in the County. (Exhibit 40.)

13 19. On or about March 19, 2020, Governor Newsom issued Executive Order N-33-20
14 ordering “all residents are directed to immediately heed the current State public health directives.”
15 (Exhibit 1.)

16 20. On or about May 4, 2020, Governor Newsom issued Executive Order N-60-20 in
17 which he ordered “All residents are directed to continue to obey State public health directives.” But,
18 Governor Newsom did not specifically mention schools as he vested power in the CDPH to make
19 determinations about the re-openings of “businesses and spaces” (Exhibit 2.)

20 21. On or about July 17, 2020, Governor Newsom announced a framework to reopen
21 schools. (Exhibit 3.) Under this plan, “Schools and school districts may reopen for in-person
22 instruction at any time if they are located in a local health jurisdiction (LHJ) that has not been on
23 the county monitoring list within the prior 14 days.” (Exhibit 4.)

24 22. On or about August 13, 2020 the Interim Health Officer, Dr. Vohra, issued an order
25 instructing Immanuel Schools to immediately cease all in-person classroom instruction operations
26 until the County was off of the State’s monitoring list for fourteen (14) days. (Exhibit 41.)

27 23. On or about August 14, 2020, Immanuel, pursuant to their well-founded belief of
28 herd immunity through the testing of Dr. Atmajian and the unconstitutionality of the Cross-

1 Defendants’ orders, opened for in-person instruction. Cross-Complainants are informed, believe,
2 and thereupon allege that as of the time of filing, no students at Immanuel have contracted COVID-
3 19.

4 24. On or about August 25, 2020 CDPH’s acting director Sandra Shewry announced
5 statewide guidance which allows “small groups of students (cohorts) to receive in-person
6 supervision, specialized and targeted services, and other support in settings that include schools that
7 are otherwise not permitted to reopen under the Framework.” Under the subsequently amended
8 guidance, cohorts are defined as, “a stable group of no more than 14 children or youth and no more
9 than two supervising adults.” (Exhibit 42.)

10 25. On or about August 28, 2020 Governor Newsom announced a new four-tier
11 framework to reopen schools (the “Framework”). (Exhibit 43.) Under this new, “more stringent”
12 Order, schools within a county considered “Tier 1” cannot open for any in-person instruction, with
13 an exception for waivers granted by local health departments for TK-6 grades. (*Ibid.*) Otherwise, to
14 become eligible for limited in-person instruction, a county must advance to the less restrictive “Tier
15 2.” To advance, “a county must remain in a tier for a minimum of three weeks before being able to
16 advance to a less restrictive tier.” (*Ibid.*) To then reopen schools, the county must maintain Tier 2
17 status for another 14 days. (*Ibid.*) However, if at any time a county’s adjusted case rate reverts back
18 to Tier 1 thresholds for two weeks, the county reverts back to Tier 1 and schools must close once
19 again to in-person meetings. (*Ibid.*)

20 26. On or about August 28, 2020 the Interim Health Officer, Dr. Vohra, issued an order
21 instructing Immanuel Schools to screen any person who enters the campus, to exclude those
22 reporting any illness in the previous ten days, and to report to the Fresno County Department of
23 Public Health within 24 hours any person who enters the campus who shows symptoms of any
24 symptoms of COVID-19. (Exhibit 44.)

25 27. As of September 9, 2020, the County of Fresno was considered Tier 1. (Exhibit 5.)

26 28. As of September 10, 2020, The County of Fresno was still listed as “widespread”
27 and unable to open for in-person instruction. (Exhibit 5.)

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1 29. On or about September 10, 2020 school age children (0-17 years) only made up 10%
2 of the cases in Fresno County. (Exhibit 45.) Cross-Complainants are informed and believe that the
3 2020 mortality of school age children (0-17 years) represent 0% of all COVID-19 mortalities in
4 Fresno County. (*Ibid.*) Whereas, 74% of the reported COVID-19 mortalities were patients 65 years
5 of age or older. (*Ibid.*)

6 30. Cross-Complainants are further informed and believe that in anticipation of the
7 distance learning framework, the California Legislature and Governor Newsom enacted a budget
8 that provided an additional \$5.3 billion (consisting of \$4.8 billion in federal funds) in funding for
9 public schools which were necessary to remediate recognized deficiencies in the distance learning
10 model and to help facilitate distanced learning. (Exhibit 6.) These funds were not made available
11 to Immanuel Schools and, as a result, Immanuel was left at a disadvantage to provide equal
12 interaction and support which would be equivalent to in-person learning. Immanuel was forced to
13 either implement a distance learning model without equivalent funding to the public-school system
14 or to re-open in a safe manner.

15 31. Immanuel took tremendous measures to evaluate if its community could reopen
16 safely by contracting with a board certified clinical pathologist, Paul Atmajian, M.D., who
17 conducted an antibody test on 198 individuals at the Immanuel Schools school site to assess the herd
18 immunity within the local community. (Decl. of Wood ¶ 19; Decl. of Atmanjian ¶ 7.)

19 32. Dr. Atmajian's testing was designed to evaluate whether individuals had COVID-19,
20 defeated COVID-19, or were immune to COVID-19. Through the antibody tests, Dr. Atmajian
21 determined that at least 59% of petitioner Immanuel School had developed antibodies for COVID-
22 19. (Decl. of Atmajian ¶ 7.)

23 33. To further increase the reliability of testing, Dr. Atmajian implemented additional
24 controls, including but not limited to performing tests for SARS-CoV2 proteins at 37 degrees
25 Celsius, use of blocking agents, use of high binding microtiter plates, and the use of three antigenic
26 targets resulting in a lower positivity rate. (Decl. of Atmajian ¶ 9.)

27 34. Cross-Complainants are informed, believe, and thereupon allege that under the less
28 reliable test which is frequently used for commercial testing, the same testing would have reported

1 approximately 80% of Immanuel Schools possessing the requisite antibodies for COVID-19. (Decl.
2 of Atmajian ¶¶ 12, 14.)

3 35. On information and belief, Dr. Atmajian’s testing demonstrates that Immanuel has
4 obtained herd immunity within their student body. (Decl. of Atmajian ¶¶ 12, 14.)

5 36. Cross-Complainants are further informed, believe, and on such information and
6 belief allege that the student body and the Immanuel community would be irreparably and
7 unnecessarily damaged due to the mandatory adoption of a distance learning model. (Decl. of Wood
8 ¶ 21.)

9 37. The County of Fresno refuses to acknowledge the existence of the antibody testing
10 and evidence of herd immunity in assessing the scope of its orders.

11 38. Teachers and schools are issuing staggering reports of decreased student involvement
12 after implementing the distance learning school model, which reflect both the harm to Immanuel
13 and the impact on the fundamental right of education. (Exhibit 8.) Studies indicate that some
14 students are unable to obtain technology, creating a “digital divide” which impacts student learning.
15 (*Ibid.*)

16 39. This “digital divide” was acknowledged by Governor Newsom’s recent issuance of
17 Executive Order N-73-20 which ordered state agencies to pursue a minimum broadband speed goal
18 of 100 megabits per second to facilitate distance learning. (Exhibit 16.) By implication, the
19 Governor’s office concedes that broadband speeds are insufficient to meet the strains of distance
20 learning.

21 40. This impact is further magnified in the private school system as these schools and
22 students do not have access to the same funding available in the public education system. Teachers
23 and staff from Immanuel report that students have difficulties with distance learning and
24 acknowledge that the distance learning system is a failure to students. (Decl. of Reimer ¶ 5; Decl.
25 of Wood ¶¶ 13, 15, 24; Decl. of James ¶ 11.)

26 41. The third grade teacher at Immanuel Schools noted that “[t]he quality of the Zoom
27 lessons was negatively impacted by technology glitches, families with more than one child learning
28 in the household, and students’ inability to focus on a computer for hours at a time.” (Decl. of James

1 ¶ 6.) This substantial absence from in-person instruction may have long-term psychological and
2 mental health impacts on children as distance learning makes “it difficult for schools to
3 identify...important learning deficits as well as... physical or sexual abuse, substance use,
4 depression, and suicidal ideation.” (Exhibit 12.)

5 42. Similarly, Linda Reimer, the Director of Counseling for Immanuel Schools, stated
6 that students “reported to me that it was a struggle to find the self-motivation to attend lessons or
7 office hours via Zoom and/or complete their assignments...[and reported] ... feelings of anxiety,
8 depression, and anger as compared to when Immanuel offered traditional in-person instruction.”
9 (Decl. of Reimer ¶ 5; See also Decl. of Wood ¶ 24.)

10 43. Experts conclude that closure of in-person learning for children is largely detrimental
11 to the health and welfare of children. (Exhibit 12.) For example the American Academy of Pediatrics
12 (“AAP”) opined that many health benefits received from in-person instruction will be lost including,
13 “child . . . development,” “social and emotional skills,” “reliable nutrition,” physical/speech and
14 mental health therapy,” and “opportunities for physical activity,” if in-person instruction is not
15 permitted. (Exhibit 12; See also Decl. of Victory ¶ 14.) This results in health issues in students.
16 (Decl. of Melson ¶ 18.)

17 44. Immanuel also reports a decline in students’ social, emotional, and spiritual
18 development under the distance learning model. (Decl. of Reimer ¶¶ 5-7; Decl. of Wood ¶¶ 15, 18.)
19 Students are struggling in the online environment as they lack the home support they need to thrive
20 in a distance learning model. (Decl. of Wood ¶ 15; Decl. of James ¶ 9.)

21 45. The CDC stated that COVID-19 posed a low risk to students and encourages States
22 to resume in-person instruction. (Exhibit 13.) In a study conducted by the CDC, South Korea
23 reported that less than 2% of COVID-19 transmissions occurred between individuals from the ages
24 0-20 with less than 1% of transmissions below the age of 10. (Exhibit 14; Decl. of Bhattacharya ¶
25 22; Decl. of Melson ¶ 12.) Similarly, Kelly Victory, M.D., opined that “children are essentially at
26 zero risk of contracting COVID-19 or becoming ill from the virus if school were to reopen.” (Decl.
27 of Victory ¶12.) There is “no evidence that children are the primary drivers of the infection” (Decl.
28 of Mu ¶ 3)

1 modern society.” (*Serrano v. Priest* (1971) 5 Cal.3d 584, 605 [“*Serrano I*”, stating that education
2 is “the lifeline of both the individual and society.”]; *Serrano v. Priest* (1976) 18 Cal.3d 728, 767-
3 768 [“*Serrano II*”, stating that education “lie[s] at the core of our free and representative form of
4 government.”]; see also Cal. Const. Art. I, § 7; id. Art. IV, § 16; Id. Art. IX, §§ 1 & 5.)

5 51. While the state does not fund private schools, the Cross-Complaining parents have a
6 fundamental liberty interest in the upbringing of their children through the private education system.

7 52. The Framework facially, and as-applied, arbitrarily treats Cross-Complainants as
8 schools, parents, and their children differently from those in other counties, even though all such
9 children and their families are all similarly situated.

10 53. Under Equal Protection claims, when the government enacts law which burdens a
11 fundamental right, courts apply strict scrutiny and analyze whether the law is narrowly tailored to
12 serve a compelling government interest. (*Serrano v. Priest* (1976) 18 Cal.3d 728, 767-768.) Cross-
13 Complainants are informed, believe, and thereupon allege that the Framework cannot survive even
14 rationale basis review. No rational basis exists for differentiating between similarly situated schools
15 based on countywide health metrics, because children are highly unlikely to be sickened by,
16 transmit, or succumb to COVID-19. “[V]ague, undifferentiated fears” do not provide a rational basis
17 for “what would otherwise be an equal protection violation.” (*City of Cleburne v. Cleburne Living*
18 *Ctr.* (1985) 473 U.S. 432, 449.)

19 54. Despite the purported risk posed by in person gatherings of children in school, the
20 State allows small groups of students (cohorts) to receive in-person supervision, specialized and
21 targeted services, and other support in settings that include schools that are otherwise not permitted
22 to reopen under the Framework. (Exhibit 42.) Likewise, the State allows children to congregate by
23 the thousands in daycare facilities and camps across California, even in Tier 1 counties. The Cross-
24 Defendants have articulated no reasonable basis for believing daycare centers and camps are safe
25 but private school campuses like Immanuel’s are not.

26 55. Cross-Complainants are informed, believe, and thereupon allege that the State
27 effectively prohibits it from operating while similarly situated schools in other counties can open
28 pursuant to the CDPH’s guidelines as Cross-Defendants’ orders are not equally applied to similarly

1 situated individuals. While public schools are also barred from providing in-person instruction in
2 Fresno County, these are not impacted as severely as private schools like Immanuel because public
3 schools do not lose funding, indeed they have gained funding, with distance learning.

4 56. The Framework facially, and as-applied, arbitrarily results in the disparate treatment
5 of students at Immanuel because it fails to make even a rational basis assessment of whether there
6 is actually a heightened risk of COVID-19 transmission at Immanuel compared to private schools
7 in non-Tier 1 counties.

8 57. Cross-Complainants, on information and belief, allege that the Framework relies on
9 an overbroad classification which presumes Immanuel, other private schools, and the 346 public
10 schools within the 6,011 square mile Fresno County have the same transmission risk. Cross-
11 Complainants further allege that the Cross-Defendants, individually and collectively, cannot meet
12 any level of scrutiny as the Cross-Defendants' orders willfully ignoring medical evidence of actual
13 transmission risk data in favor of overbroad countywide classifications is not rationally related to
14 the interest of protecting public health nor narrowly tailored to such interests.

15 58. Cross-Complainants have no adequate remedy at law, have suffered, and will
16 continue to suffer serious and irreparable harm to their constitutional rights unless Cross-Defendants
17 are enjoined from implementing and enforcing the Framework and associated guidance documents
18 which restrict the reopening of schools in a manner that violates Immanuel's right to equal protection
19 under the law.

20 **SECOND CAUSE OF ACTION**

21 **Violation of the Contracts Clause of the California Constitution**

22 **Against all Cross-Defendants**

23 59. Cross-Complainants incorporate herein by reference each and every allegation
24 contained in the preceding paragraphs of this Cross-Complaint as though fully set forth herein.

25 60. The California Constitution provides that "a...law impairing the obligations of
26 contracts may not be passed." (California Constitution Art. 1, Sect. 9). In similar fashion the United
27 States Constitution provides "No State shall . . . pass any Bill of Attainder, ex post facto law, or law
28 impairing the Obligation of Contracts . . ." (U.S. Constitution Art. 1, Sect. 10.) Legislation running

1 afoul of these constitutional protections can be stricken. These constitutional provisions are
2 intended prevent the legislative branch from enacting bills that prevented the performance of
3 existing contractual obligations.

4 61. Courts have applied the Contracts Clause of the California constitution to private
5 contracts and hold that the “state cannot impair private contractual...rights.” (*San Bernardino Public*
6 *Employees Ass’n v. City of Fontana* (1998) 67 Cal.App.4th 1215, 1222.) The State contract clause
7 echoes the rights provided by the Federal Constitution which prohibits the government from
8 impairing contractual obligations between private individuals. (*Green v. Biddle* (1823) 21 U.S. 1,
9 92.)

10 62. Cross-Complainants’ contracts, as attached hereto, are substantially impaired by
11 Cross-Defendants as parents are refusing to comply with the contracts based on the inability to
12 legally provide in-person instruction. Cross-Complainants attached and specifically incorporate
13 herein Exhibit 46 as if set forth in full.

14 63. Cross-Complainants’ contracts are conditioned on in-person instruction and
15 Immanuel may be subject to contractual liability for a failure to perform the essential terms of the
16 agreement.

17 64. Immanuel is in a position of serious financial jeopardy due to the failure to comply
18 with their contractual obligations, loss of students, and the assumption of contractual liability
19 stemming from hundreds of potential breach of contract allegations from parents. The result is that
20 Immanuel may be unable to continue operations or will be unable to offer similar services to future
21 students.

22 65. The Framework’s substantial interference with Immanuel’s contractual rights is not
23 justified by the government’s purported significant and legitimate public purpose of slowing the
24 transmission of COVID-19 in Tier 1 counties like Fresno as Cross-Complainants are informed,
25 believe and thereupon allege that herd immunity was obtained.

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1 instruct their children by operation of contract law; (3) Cross-Defendants lack any legitimate,
2 rational, or compelling interest for depriving Immanuel’s students of their right to an education; (4)
3 even if such a legitimate interest existed, the Framework and associated guidance is neither
4 rationally related nor narrowly tailored to further any such interest.

5 71. To further implement arbitrary and capricious regulations on Cross-Complainants,
6 the County of Fresno specifically targeted Cross-Defendants with unique and independent orders,
7 which Cross-Complainants, on information and belief, allege were not issued to any other business
8 within the County. These new arbitrary orders instructed Immanuel to exclude those reporting any
9 to report to the Fresno County Department of Public Health within 24 hours any person who enters
10 the campus who shows symptoms of any symptoms of COVID-19. (Exhibit 44.)

11 72. Cross-Complainants have no adequate remedy at law, have suffered, and will
12 continue to suffer serious and irreparable harm to their constitutional rights unless Cross-Defendants
13 are enjoined from implementing and enforcing the Framework and associated guidance documents
14 which restrict the reopening of schools in a manner that violates Cross-Complainants Substantive
15 Due Process rights.

16 **PRAYER FOR RELIEF**

17 WHEREFORE, Cross-Complainants pray for relief against Cross-Defendants and DOES 1
18 – 100 as follows:

19 1. An order and judgment declaring that the Framework and associated CDPH
20 guidance, facially and as-applied to Cross-Complainants, violates the Cross-Complainants’ Equal
21 Protection, Due Process, and Contract rights guaranteed under the California Constitution and that
22 Immanuel should be allowed to continue in-person instruction without delay;

23 2. An order temporarily, preliminarily, and permanently injunction enjoining and
24 prohibiting Cross-Defendants, and all persons acting under, in concert with or for them, from
25 enforcing the Framework and associated guidance or otherwise interfering with Cross-
26 Complainants’ constitutional and statutory guarantees;

27 3. Compensatory and actual damages in an amount to be proven at the time of trial;


28 4. Costs of suit incurred herein;

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- 5. Attorneys' fees; and
- 6. For such other and further relief that the Court may deem just and proper.

DATED: September 10, 2020

TYLER & BURSCH, LLP

By: 

Jennifer L. Bursch, Esq.
Attorneys for Complainants, Immanuel Schools,
Ryan Wood, Greg Jackson, and Matt Zulim

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VERIFICATION

I have read the foregoing **VERIFIED CROSS-COMPLAINT** and know its contents.

I am a party to this action. The matters stated in the foregoing document are true of my own knowledge except as to those matters which are stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on 9/10/2020, at Reedley, California.



Immanuel Schools
Ryan Wood, Chief Executive Officer

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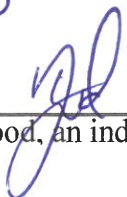
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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on 9/10/2020, at Reedley, California.



Ryan Wood, an individual

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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on Sep 10, 2020, at Kingsburg, California.



Matt Zulim (Sep 10, 2020 21:44 PDT)

Matt Zulim, an individual

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Executed on Sep 10, 2020, at Kingsburg, California.

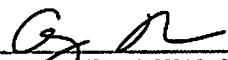

Greg Jackson (Sep 10, 2020 21:36 PDT)
Greg Jackson, an individual

EXHIBIT "1"

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

EXECUTIVE ORDER N-33-20

WHEREAS on March 4, 2020, I proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; and

WHEREAS in a short period of time, COVID-19 has rapidly spread throughout California, necessitating updated and more stringent guidance from federal, state, and local public health officials; and

WHEREAS for the preservation of public health and safety throughout the entire State of California, I find it necessary for all Californians to heed the State public health directives from the Department of Public Health.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes of the State of California, and in particular, Government Code sections 8567, 8627, and 8665 do hereby issue the following Order to become effective immediately:

IT IS HEREBY ORDERED THAT:

- 1) To preserve the public health and safety, and to ensure the healthcare delivery system is capable of serving all, and prioritizing those at the highest risk and vulnerability, all residents are directed to immediately heed the current State public health directives, which I ordered the Department of Public Health to develop for the current statewide status of COVID-19. Those directives are consistent with the March 19, 2020, Memorandum on Identification of Essential Critical Infrastructure Workers During COVID-19 Response, found at: <https://covid19.ca.gov/>. Those directives follow:

ORDER OF THE STATE PUBLIC HEALTH OFFICER
March 19, 2020

To protect public health, I as State Public Health Officer and Director of the California Department of Public Health order all individuals living in the State of California to stay home or at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors, as outlined at <https://www.cisa.gov/identifying-critical-infrastructure-during-covid-19>. In addition, and in consultation with the Director of the Governor's Office of Emergency Services, I may designate additional sectors as critical in order to protect the health and well-being of all Californians.

Pursuant to the authority under the Health and Safety Code 120125, 120140, 131080, 120130(c), 120135, 120145, 120175 and 120150, this order is to go into effect immediately and shall stay in effect until further notice.

The federal government has identified 16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation or

destruction would have a debilitating effect on security, economic security, public health or safety, or any combination thereof. I order that Californians working in these 16 critical infrastructure sectors may continue their work because of the importance of these sectors to Californians' health and well-being.

This Order is being issued to protect the public health of Californians. The California Department of Public Health looks to establish consistency across the state in order to ensure that we mitigate the impact of COVID-19. Our goal is simple, we want to bend the curve, and disrupt the spread of the virus.

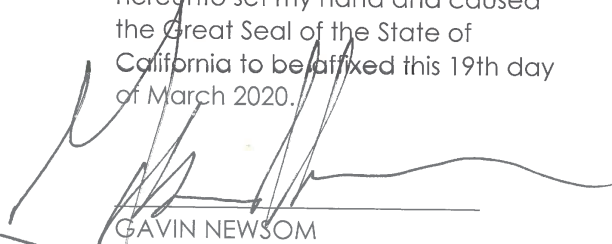
The supply chain must continue, and Californians must have access to such necessities as food, prescriptions, and health care. When people need to leave their homes or places of residence, whether to obtain or perform the functions above, or to otherwise facilitate authorized necessary activities, they should at all times practice social distancing.

- 2) The healthcare delivery system shall prioritize services to serving those who are the sickest and shall prioritize resources, including personal protective equipment, for the providers providing direct care to them.
- 3) The Office of Emergency Services is directed to take necessary steps to ensure compliance with this Order.
- 4) This Order shall be enforceable pursuant to California law, including, but not limited to, Government Code section 8665.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 19th day of March 2020.



GAVIN NEWSOM
Governor of California

ATTEST:



ALEX PADILLA
Secretary of State



EXHIBIT "2"

EXECUTIVE ORDER N-60-20

WHEREAS on March 4, 2020, I proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; and

WHEREAS on March 19, 2020, I issued Executive Order N-33-20, which directed all California residents to immediately heed current State public health directives; and

WHEREAS State public health directives, available at <https://covid19.ca.gov/stay-home-except-for-essential-needs/>, have ordered all California residents stay home except for essential needs, as defined in State public health directives; and

WHEREAS COVID-19 continues to menace public health throughout California; and

WHEREAS the extent to which COVID-19 menaces public health throughout California is expected to continue to evolve, and may vary from place to place within the State; and

WHEREAS California law promotes the preservation of public health by providing for local health officers—appointed by county boards of supervisors and other local authorities—in addition to providing for statewide authority by a State Public Health Officer; and

WHEREAS these local health officers, working in consultation with county boards of supervisors and other local authorities, are well positioned to understand the local needs of their communities; and

WHEREAS local governments are encouraged to coordinate with federally recognized California tribes located within or immediately adjacent to the external geographical boundaries of such local government jurisdiction; and

WHEREAS the global COVID-19 pandemic threatens the entire State, and coordination between state and local public health officials is therefore, and will continue to be, necessary to curb the spread of COVID-19 throughout the State; and

WHEREAS State public health officials have worked, and will continue to work, in consultation with their federal, state, and tribal government partners; and

WHEREAS the State Public Health Officer has articulated a four-stage framework—which includes provisions for the reopening of lower-risk businesses and spaces (“Stage Two”), to be followed by the reopening of higher-risk businesses and spaces (“Stage Three”)—to allow Californians to gradually resume various activities while continuing to preserve public health in the face of COVID-19; and

WHEREAS the threat posed by COVID-19 is dynamic and ever-changing, and the State's response to COVID-19 (including implementation of the four-stage framework) should likewise retain the ability to be dynamic and flexible; and

WHEREAS to preserve this flexibility, and under the provisions of Government Code section 8571, I find that strict compliance with the Administrative Procedure Act, Government Code section 11340 et seq., would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the COVID-19 pandemic.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes of the State of California, and in particular, Government Code sections 8567, 8571, 8627, and 8665; and also in accordance with the authority vested in the State Public Health Officer by the laws of the State of California, including but not limited to Health and Safety Code sections 120125, 120130, 120135, 120140, 120145, 120150, 120175, and 131080; do hereby issue the following Order to become effective immediately:

IT IS HEREBY ORDERED THAT:

- 1) All residents are directed to continue to obey State public health directives, as made available at <https://covid19.ca.gov/stay-home-except-for-essential-needs/> and elsewhere as the State Public Health Officer may provide.
- 2) As the State moves to allow reopening of lower-risk businesses and spaces ("Stage Two"), and then to allow reopening of higher-risk businesses and spaces ("Stage Three"), the State Public Health Officer is directed to establish criteria and procedures—as set forth in this Paragraph 2—to determine whether and how particular local jurisdictions may implement public health measures that depart from the statewide directives of the State Public Health Officer.

In particular, the State Public Health Officer is directed to establish criteria to determine whether and how, in light of the extent to which the public health is menaced by COVID-19 from place to place within the State, local health officers may (during the relevant stages of reopening) issue directives to establish and implement public health measures less restrictive than any public health measures implemented on a statewide basis pursuant to the statewide directives of the State Public Health Officer.

The State Public Health Officer is further directed to establish procedures through which local health officers may (during the relevant stages of reopening) certify that, if their respective jurisdictions are subject to proposed public health measures (which they shall specify to the extent such specification may be required by the State Public Health Officer) that are less restrictive than public health measures implemented on a statewide basis pursuant to the statewide directives of the State Public Health Officer, the public health will not be menaced. The State Public Health Officer shall additionally establish procedures to permit, in a manner consistent with public health and

safety, local health officers who submit such certifications to establish and implement such less restrictive public health measures within their respective jurisdictions.

The State Public Health Officer may, from time to time and as she deems necessary to respond to the dynamic threat posed by COVID-19, revise the criteria and procedures set forth in this Paragraph 2. Nothing related to the establishment or implementation of such criteria or procedures, or any other aspect of this Order, shall be subject to the Administrative Procedure Act, Government Code section 11340 et seq. Nothing in this Paragraph 2 shall limit the authority of the State Public Health Officer to take any action she deems necessary to protect public health in the face of the threat posed by COVID-19, including (but not limited to) any necessary revision to the four-stage framework previously articulated by the State Public Health Officer.

- 3) Nothing in this Order shall be construed to limit the existing authority of local health officers to establish and implement public health measures within their respective jurisdictions that are more restrictive than, or that otherwise exist in addition to, the public health measures imposed on a statewide basis pursuant to the statewide directives of the State Public Health Officer.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 4th day of May 2020.

GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

EXHIBIT "3"

Governor Gavin Newsom Lays Out Pandemic Plan for Learning and Safe Schools

Published: Jul 17, 2020

Plan centers on rigorous instruction for students even when schools are physically closed

Decisions to open in-person will be determined by local data that the public can track on a daily basis

Schools open for in-person instruction will implement precautions, including a requirement that students in 3rd grade and above wear masks

Newsom: "In California, health data will determine when a school can be physically open – and when it must close – but learning should never stop"

SACRAMENTO – Governor Gavin Newsom today announced his plan for learning and safe schools ahead of the 2020–2021 school year, as the California Department of Public Health issued a framework for when and how schools should reopen for in-person instruction.

“Learning is non-negotiable,” said Governor Newsom. “The virus will be with us for a year or more, and school districts must provide meaningful instruction in the midst of this pandemic. In California, health data will determine when a school can be physically open – and when it must close – but learning should never stop. Students, staff, and parents all prefer in-classroom instruction, but only if it can be done safely.”

The Governor’s plan centers on five key areas:

1) Safe in-person school based on local health data

The California Department of Public Health today issued updated schools guidance that includes using existing epidemiological metrics to determine if school districts can start in-person instruction. CDPH currently uses six indicators to track the level of COVID-19 infection in each California county as well as the preparedness of the county health care system – data that includes the number of new infections per 100,000 residents, the test positivity rate, and the change in hospitalization rate, among others. Any county that does not meet the state’s benchmarks is put on the County Monitoring List.

Schools located in counties that are on the Monitoring List must not physically open for in-person instruction until their county has come off the Monitoring List for 14 consecutive days. Schools in counties that have not been on the Monitoring List for the prior 14 days may begin in-person instruction, following public health guidelines. School community members – including parents, teachers, staff and students – can track daily data on whether and why their county is on the Monitoring List at <https://covid19.ca.gov/roadmap-counties/#track-data>.

There is a single exception. Local health officers may grant a waiver to allow elementary schools to reopen in-person instruction if the waiver is requested by the district superintendent, in consultation with labor, parents and community-based organizations. When considering a waiver request, the local health officer must consider local data and consult with the California Department of Public Health.

The Department also issued updated guidance for when schools must physically close and revert to distance learning because of COVID-19 infections. Following a confirmed case of a student who was at school during his or her infectious period, other exposed students and staff should be quarantined for 14 days. The school should revert to distance learning when multiple cohorts have cases or 5 percent of students and staff test positive within a 14-day period. The district should revert to distance learning when 25 percent or more of its schools have been physically closed due to COVID-19 within 14 days. Closure decisions should be made in consultation with local health officers. After 14 days, school districts may return to in-person instruction with the approval of the local public health officer.

2) Strong mask requirements for anyone in the school

In the updated guidance, all staff and students in 3rd grade and above will be required to wear a mask or face covering. Students in 2nd grade and below are strongly encouraged to wear a face covering. Students should be provided a face covering if they do not have one. The state has delivered over 18 million face coverings to schools to support them to reopen and ensure all students can participate in learning.

3) Physical distancing requirements & other adaptations

In the updated guidance, CDPH requires that all adults stay 6 feet from one another and 6 feet away from children, while students should maintain 6 feet of distance from one another as practicable. Anyone entering the school must do a health screen, and any student or staff exhibiting a fever or other symptoms will be immediately sent home. The guidance also provides that if anyone in a student or staff member’s household is sick, they too should stay home.

4) Regular testing and dedicated contact tracing for outbreaks at schools

The public health guidance recommends staff in every California school be tested for COVID-19 periodically based on local disease trends and as testing capacity allows. The Governor also announced today that the state will provide resources and technical assistance for COVID-19 investigations in school settings.

5) Rigorous distance learning

Over the course of the pandemic, most schools will likely face physical closure at some point due to COVID-19. The Legislature and Governor Newsom enacted a budget that provided \$5.3 billion in additional funding to support learning, and set requirements to ensure schools provide rigorous and grade-appropriate instruction. Under newly enacted state law, school districts are required to provide:

- Devices and connectivity so that every child can participate in distance learning.
- Daily live interaction for every child with teachers and other students.

- Class assignments that are challenging and equivalent to in-person instruction.
- Targeted supports and interventions for English learners and special education students.

The full guidance from the California Department of Public Health can be found here: <https://files.covid19.ca.gov/pdf/guidance-schools.pdf>

###

EXHIBIT "4"



SONIA Y. ANGELL, MD, MPH
State Public Health Officer & Director

State of California—Health and Human Services Agency
California Department of Public Health



GAVIN NEWSOM
Governor

**COVID-19 and Reopening In-Person Learning
Framework for K-12 Schools in California, 2020-2021 School Year**

July 17, 2020

Overview

California schools have been closed for in-person instruction since mid-March 2020 due to the COVID-19 pandemic. School closures to in-person instruction were part of a broader set of recommendations intended to reduce transmission of SARS-CoV-2, the virus that causes COVID-19. CDPH developed the following framework to support school communities as they decide when and how to implement in-person instruction for the 2020-2021 school year. New evidence and data about COVID-19 transmission, including variations by age, and the effectiveness of disease control and mitigation strategies continues to emerge regularly. Recommendations regarding in-person school reopening and closure should be based on the available evidence as well state and local disease trends.

The CA [School Sector Specific Guidelines](#), and the Centers for Disease Control and Prevention [CDC](#) have published additional guidance on school re-entry.

In-Person Re-Opening Criteria

Schools and school districts may reopen for in-person instruction at any time if they are located in a local health jurisdiction (LHJ) that has not been on the county¹ monitoring list within the prior 14 days.

If the LHJ has been on the monitoring list within the last 14 days, the school must conduct distance learning only, until their LHJ has been off the monitoring list for at least 14 days.²

¹ School districts in LHJs that are cities are considered to be included as part of the county if the county is on the monitoring list.

² A waiver of this criteria may be granted by the local health officer for elementary schools to open for in-person instruction. A waiver may only be granted if one is requested by the superintendent (or equivalent for charter or private schools), in consultation with labor, parent and community organizations. Local health officers must review local community epidemiological data, consider other public health interventions, and consult with CDPH when considering a waiver request.





SONIA Y. ANGELL, MD, MPH
State Public Health Officer & Director

State of California—Health and Human Services Agency California Department of Public Health



GAVIN NEWSOM
Governor

Guidance Once Re-Opened to In-Person Instruction

How should schools think about testing?

Once schools are re-opened to at least some in-person instruction, it is recommended that surveillance testing be implemented based on the local disease trends. If epidemiological data indicates concern for increasing community transmission, schools should increase testing of staff to detect potential cases as lab testing capacity allows.

Who should be tested and how often?

School staff are essential workers, and staff includes teachers, para-professionals, cafeteria workers, janitors, bus drivers, or any other school employee that may have contact with students or other staff. School districts and schools shall test staff periodically, as testing capacity permits and as practicable. Examples of recommended frequency include testing all staff over 2 months, where 25% of staff are tested every 2 weeks, or 50% every month to rotate testing of all staff over time.

What if a school or school district reopens to in-person instruction, but the county is later placed on the county monitoring list?

Schools should begin testing staff, or increase frequency of staff testing but are not required to close.





SONIA Y. ANGELL, MD, MPH
State Public Health Officer & Director

State of California—Health and Human Services Agency California Department of Public Health



GAVIN NEWSOM
Governor

What measures should be taken when a student, teacher or staff member has symptoms, is a contact of someone infected, or is diagnosed with COVID-19?

| | Student or Staff with: | Action | Communication |
|----|--|--|--|
| 1. | COVID-19 Symptoms (e.g., fever, cough, loss of taste or smell, difficulty breathing) Symptom Screening: Per CA School Sector Specific Guidelines | <ul style="list-style-type: none"> Send home Recommend testing (If positive, see #3, if negative, see #4) School/classroom remain open | <ul style="list-style-type: none"> No Action needed |
| 2. | Close contact (+) with a confirmed COVID-19 case | <ul style="list-style-type: none"> Send home Quarantine for 14 days from last exposure Recommend testing (but will not shorten 14-day quarantine) School/classroom remain open | <ul style="list-style-type: none"> Consider school community notification of a known contact |
| 3. | Confirmed COVID-19 case infection | <ul style="list-style-type: none"> Notify the local public health department Isolate case and exclude from school for 10 days from symptom onset or test date Identify contacts (+), quarantine & exclude exposed contacts (likely entire cohort (++)) for 14 days after the last date the case was present at school while infectious Recommend testing of contacts, prioritize symptomatic contacts (but will not shorten 14-day quarantine) Disinfection and cleaning of classroom and primary spaces where case spent significant time School remains open | <ul style="list-style-type: none"> School community notification of a known case |
| 4. | Tests negative after symptoms | <ul style="list-style-type: none"> May return to school 3 days after symptoms resolve School/classroom remain open | <ul style="list-style-type: none"> Consider school community notification if prior awareness of testing |





SONIA Y. ANGELL, MD, MPH
State Public Health Officer & Director

State of California—Health and Human Services Agency California Department of Public Health



GAVIN NEWSOM
Governor

(†) A contact is defined as a person who is <6 feet from a case for >15 minutes. In some school situations, it may be difficult to determine whether individuals have met this criterion and an entire cohort, classroom, or other group may need to be considered exposed, particularly if people have spent time together indoors.

(††) A cohort is a stable group with fixed membership that stays together for all courses and activities (e.g., lunch, recess, etc.) and avoids contact with other persons or cohorts.

Guidance on School Closure

What are the criteria for closing a school?

Individual school closure is recommended based on the number of cases, the percentage of the teacher/students/staff that are positive for COVID-19, and following consultation with the Local Health Officer. Individual school closure may be appropriate when there are multiple cases in multiple cohorts at a school or when at least 5 percent of the total number of teachers/student/staff are cases within a 14-day period, depending on the size and physical layout of the school.

The Local Health Officer may also determine school closure is warranted for other reasons, including results from public health investigation or other local epidemiological data.

If a school is closed for in-person learning, when may it reopen?

Schools may typically reopen after 14 days and the following have occurred:

- Cleaning and disinfection
- Public health investigation
- Consultation with the local public health department

What are the criteria for closing a school district?



State of California—Health and Human Services Agency
California Department of Public Health



SONIA Y. ANGELL, MD, MPH
State Public Health Officer & Director

GAVIN NEWSOM
Governor

A superintendent should close a school district if 25% or more of schools in a district have closed due to COVID-19 within 14 days, and in consultation with the local public health department.

If a school district is closed, when may it reopen?

Districts may typically reopen after 14 days, in consultation with the local public health department.

State Resources for Case, Contact & Outbreak Investigations

California is committed to supporting local health departments with resources and other technical assistance regarding school case, contact, and outbreak investigations.



EXHIBIT "5"

Some indoor business operations are open with modifications

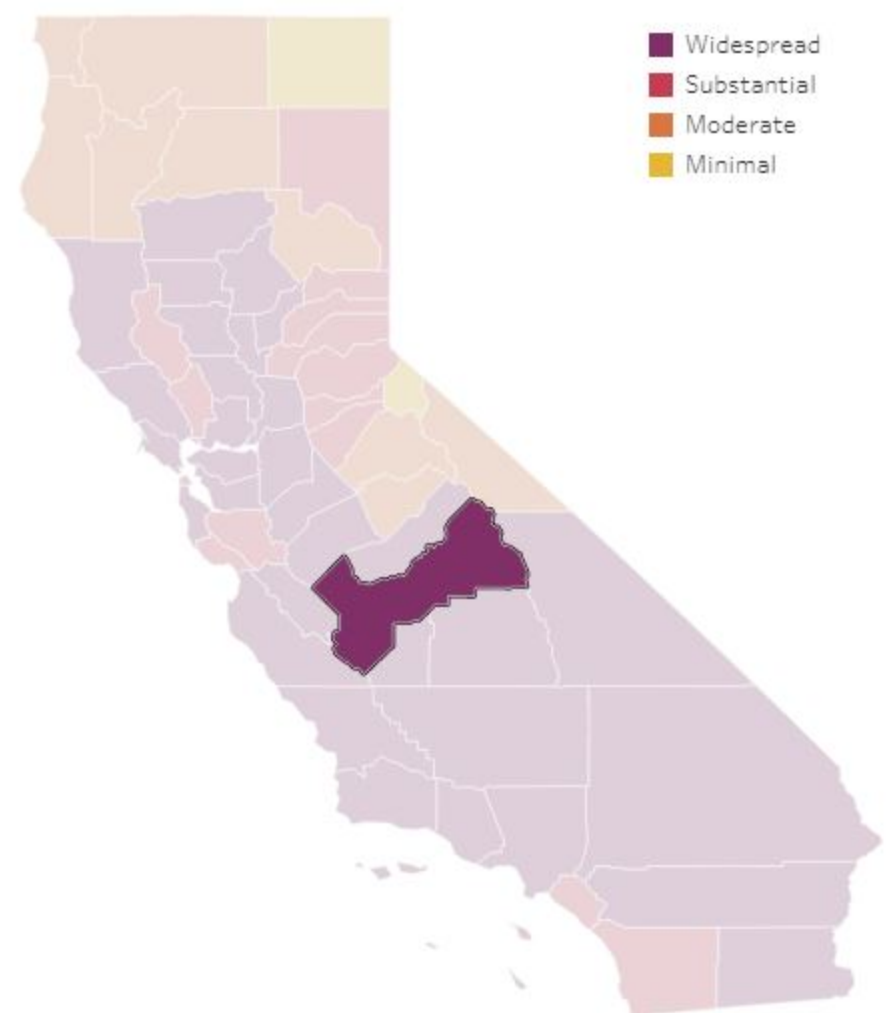
| | | |
|---|----------------------------|---------------------|
| MINIMAL | Less than 1 | Less than 2% |
| Most indoor business operations are open with modifications | daily new cases (per 100k) | Positive tests |

Understand your county's status

Every county in California is assigned to a tier based on its test positivity and adjusted case rate. At a minimum, counties must remain in a tier for at least 3 weeks before moving forward. Data is reviewed weekly and tiers are updated on Tuesdays. To move forward, a county must meet the next tier's criteria for two consecutive weeks. If a county's metrics worsen for two consecutive weeks, it will be assigned a more restrictive tier. Public health officials are constantly monitoring data and can step in if necessary.

Fresno County Metrics

- 12.4**
New COVID-19 Positive cases per day per 100K
- 12.6**
Adjusted case rate for tier assignment
- 9.8%**
Positivity Rate



- Widespread
- Substantial
- Moderate
- Minimal

Data shown for week ending 8/29/20

+ a b | e a u [Interactive chart controls]

[Learn more about tier assignments and how data is calculated in the California Blueprint Data Chart.](#)

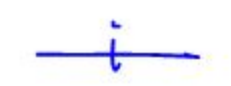
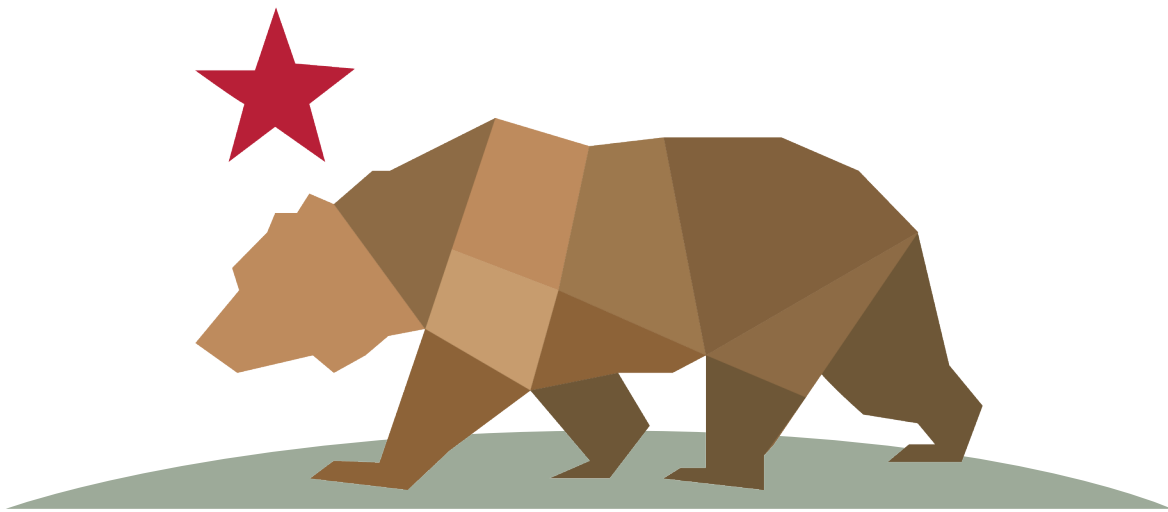


EXHIBIT "6"



CALIFORNIA STATE BUDGET
2020-21



Gavin Newsom, Governor
State of California

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INTRODUCTION

The Budget closes a \$54.3 billion gap in 2020-21 and significantly reduces the state's ongoing structural deficit. Despite the global economic crisis caused by the COVID-19 pandemic, the state's prudent fiscal management, including its structurally balanced budgets and record reserves, puts it in a much better position to contend with these challenges.

The COVID-19 pandemic has impacted every sector of the state's economy and has caused record high unemployment—almost 1 in 5 Californians who were employed in February were out of work in May—and further action from the federal government is needed given the magnitude of the crisis. The Governor continues his efforts to secure \$1 trillion in flexible federal aid to state and local governments across the country. This additional support is critical to mitigate the worst effects of the public health crisis, encourage recovery, and support Californians in need.

The Budget makes critical investments to save lives and promote economic recovery by continuing critical purchases of personal protective equipment and other safeguards necessary to safely reopen the economy during the COVID-19 pandemic. It protects public education and supports Californians facing the greatest hardships. This is important since the pandemic is having a disproportionate impact on lower-wage workers and is further exacerbating income inequality. Finally, the Budget supports job creation, economic recovery and opportunity by recognizing and supporting the role small businesses play in job creation in the state.

BUDGET POSITIONS THE STATE FOR THE FUTURE

At the Governor's Budget in January, the state was projecting a surplus of \$5.6 billion. At the May Revision, the state confronted a budget deficit of \$54.3 billion—a four-month swing of \$60 billion caused by the COVID-19 Recession. The Budget closes this gap and brings the state's resources and spending into balance while preserving reserves for future years.

The Budget significantly reduces the structural deficit over the next several years, but there is still more work to do to eliminate it. To reduce the structural deficit in the coming years, the Budget sustains the January 1, 2022 suspension of several ongoing programmatic expansions that were made in the 2019 Budget Act. In addition, the Budget accelerates the suspension of most Proposition 56 rate increases to July 1, 2021. Despite these measures, the Administration forecasts an operating deficit of \$8.7 billion in 2021-22, after accounting for reserves.

BALANCED APPROACH TO CLOSING THE BUDGET GAP

The Budget takes a balanced approach to closing the \$54.3 billion budget deficit and sets aside \$2.6 billion in the Special Fund for Economic Uncertainties, including \$716 million for the state to respond quickly to the changing conditions of the COVID-19 pandemic. The Budget is balanced as follows:

- **Reserves**—The Budget draws down \$8.8 billion in reserves from the Rainy Day Fund (\$7.8 billion), the Safety Net Reserve (\$450 million), and all of the funds in the Public School System Stabilization Account.
- **Triggers**—The Budget includes \$11.1 billion in reductions and deferrals that will be restored if at least \$14 billion in federal funds are received by October 15, 2020. If the state receives a lesser amount between \$2 billion and \$14 billion, the reductions and deferrals will be partially restored. The trigger includes \$6.6 billion in deferred spending on schools, approximately \$970 million in funding for the University of California and the California State University, \$2.8 billion for state employee compensation, \$150 million for courts, and funding for child support administration, teacher training, moderate-income housing, and infrastructure to support infill housing. The trigger would also fund an additional \$250 million for county programs to backfill revenue losses.
- **Federal Funds**—The Budget relies on \$10.1 billion in federal funds that provide General Fund relief, including \$8.1 billion already received. This includes the

enhanced Federal Medical Assistance Percentage (FMAP), a portion of the state's Coronavirus Relief Fund allocation and funds provided for childcare programs.

- **Revenues**—The Budget temporarily suspends the use of net operating losses for medium and large businesses and temporarily limits to \$5 million the amount of business incentive credits a taxpayer can use in any given tax year. These short-term limitations will generate \$4.4 billion in new revenues in the 2020-21 fiscal year.
- **Borrowing/Transfers/Deferrals**—The Budget relies on \$9.3 billion in special fund borrowing and transfers, as well as other deferrals for K-14 schools. (Approximately \$900 million in additional special fund borrowing is associated with the reductions to employee compensation and is contained in the trigger.)
- **Cancelled Expansions, Updated Assumptions and Other Solutions**—The remaining \$10.6 billion of solutions includes:
 - Cancelling multiple program expansions and anticipating increased government efficiencies.
 - Higher ongoing revenues above the May Revision forecast.
 - Lower health and human services caseload costs than the May Revision estimate.

Summary of Solutions

(Dollars in Billions)

| Category | 2020 Budget Act |
|--|-----------------|
| 1 Reserves | \$8.8 |
| 2 Borrowing/Transfers/Deferrals | 9.3 |
| 3 Revenues | 4.4 |
| 4 Federal Funds | 10.1 |
| 5 Cancelled Expansions, Updated Assumptions, and Other | 10.6 |
| 6 Trigger Reductions/Additional Deferrals | 11.1 |
| Total | \$54.3 |

STRENGTHENING EMERGENCY RESPONSE AND PROTECTING PUBLIC HEALTH

The Budget reflects estimated spending of \$5.7 billion to respond directly to the COVID-19 pandemic. Expenditures include the necessary personal protective equipment to reopen the economy, hospital surge preparation, and other expenditures to support populations at greater risk of contracting COVID-19. Under federal law, at least 75 percent of these expenditures will be reimbursed by the federal government. The Budget also includes a \$716 million reserve within the Special Fund for Economic

INTRODUCTION

Uncertainties so the state can respond to the changing conditions of the COVID-19 pandemic.

The Budget also strengthens the state's emergency preparedness in other areas. It makes new investments in wildfire prevention and mitigation, including \$85.6 million to CAL FIRE for firefighting resources and surge capacity and \$50 million for community power resiliency. The Budget also supports the new state Earthquake Early Warning Program, integrates the Seismic Safety Commission into the California Office of Emergency Services, and significantly expands efforts to address cybersecurity threats.

The Budget also includes support for counties that are on the front lines of addressing the public health impacts of the pandemic. Of the \$9.5 billion in Coronavirus Relief Fund received by the state, \$4.5 billion is allocated to local school districts, \$1.3 billion is allocated to counties, and \$500 million to cities. The Budget also includes \$750 million General Fund to provide support for counties experiencing revenue losses due to the pandemic. Funds are available for all local governments in compliance with federal guidance and state health requirements on COVID-19 response. If sufficient federal funds are made available by October 15, 2020, the Budget provides an additional \$250 million in support to counties in protecting programs serving vulnerable populations.

PROTECTING PUBLIC EDUCATION

Due to declining revenue, the constitutional Proposition 98 guarantee level of \$70.9 billion is more than \$10 billion below the minimum guarantee at the 2019 Budget Act. However, the Budget offsets this loss in several ways and defers \$12.9 billion in payments into the next fiscal year to preserve programs and give K-12 schools and California Community Colleges the resources needed to safely reopen. The state has also committed to purchasing personal protective equipment and other supplies needed to reopen schools safely.

Furthermore, the Budget allocates \$5.3 billion (\$4.8 billion federal funds) to mitigate learning loss and support the immediate needs of students and schools, with a focus on students disproportionately impacted by the pandemic. The Budget also redirects \$2.3 billion designated for long-term unfunded pension liabilities to reduce school (district and community college district) employer contribution rates in the next two years. Finally, the Budget commits to making supplemental appropriations above the Proposition 98 guarantee for several years starting in 2021-22, which will accelerate General Fund support for schools over the multi-year forecast period.

In addition to these funding changes, the Budget also increases support for students in special education programs by raising per-pupil base rates, and initiates a process to inform future changes in school policing.

SUPPORTING CALIFORNIANS FACING THE GREATEST HARDSHIPS

The Budget takes several steps to support Californians who are facing the greatest hardships. It maintains eligibility for the Medi-Cal program, including the expanded senior eligibility enacted in the 2019 Budget Act, and preserves optional benefits and Proposition 56 provider rate increases in the budget year. The Budget also maintains In-Home Supportive Services (IHSS) service hours and developmental services rates at current levels for the budget year. It includes an increase in the overall maximum Supplemental Security Income/State Supplemental Payment grant by passing the federal cost-of-living adjustment onto recipients. In CalWORKs, the Budget maintains eligibility and grant levels and extends the time limit for aid to adult recipients from 48 months to 60 months, the maximum under federal law. These steps will reduce childhood poverty and provide vital support for families in need during the current economic crisis.

The Budget also protects programs for working families and students. It preserves last year's expansion of the state Earned Income Tax Credit, including the Young Child Tax Credit, and expands eligibility to include undocumented filers with a child age five and under. It also preserves the Covered California health insurance subsidies for middle-income households enacted in the 2019 Budget Act, and it protects Cal Grants at current levels of eligibility, including the recently established supplemental Cal Grant access award for students with dependent children. These steps will enable more workers and families to cope with the impact of the pandemic.

The Budget also prioritizes funds to mitigate homelessness and takes a new approach by allocating \$600 million to the Department of Housing and Community Development for HomeKey to acquire permanent housing through the purchase and renovation of motel properties throughout the state. The Budget also includes \$300 million General Fund to cities, counties, and continuums of care to support efforts to reduce homelessness.

ENHANCING GOVERNMENT EFFICIENCY

Historically, state government has been slow to adopt modernizations in the workplace. But the COVID-19 pandemic has forced a massive experiment in telework and allowed

state managers, led by the Government Operations Agency, to rethink business processes.

This transformation will allow for expanded long-term telework strategies, increased modernization and delivery of government services online, reconfigured office space, reduced leased space, and when possible, flexible work schedules for employees.

Nearly all state operations will be reduced by approximately 5 percent over the next two years. Nonessential contracts, purchases, and travel are suspended and departments have been directed to fill only the most essential vacant positions.

PROMOTING ECONOMIC RECOVERY

Small businesses will play a critical role in California's economic recovery. For this reason, the Budget provides an additional \$75 million for loan loss mitigation and reducing the cost of capital for small businesses to address gaps in available federal assistance. These funds will be administered by the California Infrastructure and Economic Development Bank. The Budget also expands the \$800 Minimum Franchise Tax exemption for first-year corporations to all businesses, removing a barrier to small business creation for all types of small businesses.

A strong recovery must lift people and small businesses up in all parts of the state. For this reason, the Budget includes funding for additional staff at the Governor's Office of Business & Economic Development to connect businesses with opportunities to create jobs in regions of the state that have historically experienced less economic growth. The Budget also includes funding to expand University of California medical training in Fresno and Riverside and supports an economic development effort in the Fresno region.

The Administration is committed to creating the necessary conditions for a more equitable recovery; to this end, the Budget reflects an increase of the statewide minimum wage to \$15 per hour by 2022. The increases over the next few years will affect roughly 60 percent of Californians who earn the minimum wage. The Budget also maintains last year's historic expansion of the Earned Income Tax Credit, providing a tax credit to households making up to \$30,000 annually (full-time at minimum wage), and provides a credit of \$1,000 for every family that otherwise qualifies for a credit and has at least one child age 5 and under.

The Governor has convened a Task Force on Business and Jobs Recovery—a diverse group of leaders from business, government, labor, and the non-profit sector—to

develop actionable recommendations and advise the state on how economic recovery can be expedited and address the effects of wage disparity exacerbated by COVID-19. The Administration will work with the Legislature as well as the Task Force, the Governor's Council of Economic Advisors, and other stakeholders to develop further actions that support a safe, swift, and equitable economic recovery.

DEFINING THE PATH FORWARD

California's history has been marked by periods of great challenge—brought on by global conflict and change, natural disasters, and economic crises. California's history has also been one of innovation, ingenuity, resiliency and resurgence. The COVID-19 pandemic and the recession that has accompanied it pose a new challenge for the state. The Budget takes steps to reduce spending commitments and address long-term structural deficits, but deficits remain and further actions will be needed especially if the federal government does not act.

California will overcome this challenge as it has overcome challenges in the past. The state, its businesses and its families will recover and will emerge stronger and more resilient. However, the size and scale of this crisis has not been seen in recent times and the federal government must do more to prevent exacerbating income inequality that existed before the pandemic.

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SUMMARY CHARTS

This section provides various statewide budget charts and tables.

2020 Budget Act
General Fund Budget Summary
(Dollars in Millions)

| | 2019-20 | 2020-21 |
|--|------------------|------------------|
| Prior Year Balance | \$11,280 | \$1,972 |
| Revenues and Transfers | \$137,625 | \$137,719 |
| Total Resources Available | \$148,905 | \$139,691 |
| Non-Proposition 98 Expenditures | \$94,277 | \$88,834 |
| Proposition 98 Expenditures | \$52,656 | \$45,066 |
| Total Expenditures | \$146,933 | \$133,900 |
| Fund Balance | \$1,972 | \$5,791 |
| Reserve for Liquidation of Encumbrances | \$3,175 | \$3,175 |
| Special Fund for Economic Uncertainties | -\$1,203 | \$2,616 |
| COVID Reserve | - | (\$716) |
| Safety Net Reserve | \$900 | \$450 |
| Budget Stabilization Account/Rainy Day Fund | \$16,116 | \$8,310 |

Note: Numbers may not add due to rounding.

General Fund Expenditures by Agency

(Dollars in Millions)

| | 2019-20 | 2020-21 | Change from 2019-20 | |
|---------------------------------------|------------------|------------------|---------------------|----------------|
| | | | Dollar Change | Percent Change |
| Legislative, Judicial, Executive | \$6,860 | \$4,522 | -\$2,338 | -34.1% |
| Business, Consumer Services & Housing | 1,262 | 341 | -921 | -73.0% |
| Transportation | 295 | 239 | -56 | -19.0% |
| Natural Resources | 3,770 | 3,616 | -155 | -4.1% |
| Environmental Protection | 723 | 123 | -600 | -83.0% |
| Health and Human Services | 41,925 | 44,808 | 2,884 | 6.9% |
| Corrections and Rehabilitation | 13,444 | 13,353 | -91 | -0.7% |
| K-12 Education | 54,849 | 48,067 | -6,782 | -12.4% |
| Higher Education | 17,067 | 15,795 | -1,272 | -7.5% |
| Labor and Workforce Development | 186 | 159 | -27 | -14.5% |
| Government Operations | 2,333 | 1,578 | -755 | -32.4% |
| General Government: | | | | |
| Non-Agency Departments | 1,098 | 908 | -190 | -17.3% |
| Tax Relief/Local Government | 505 | 1,182 | 676 | 133.9% |
| Statewide Expenditures | 2,616 | -791 | -3,407 | -130.2% |
| Total | \$146,933 | \$133,900 | -\$13,033 | -8.9% |

Note: Numbers may not add due to rounding.

2020-21 Total State Expenditures by Agency

(Dollars in Millions)

| | General Fund | Special Funds | Bond Funds | Totals |
|---------------------------------------|------------------|-----------------|----------------|------------------|
| Legislative, Judicial, Executive | \$4,522 | \$3,631 | \$566 | \$8,719 |
| Business, Consumer Services & Housing | 341 | 1,072 | 1,154 | 2,567 |
| Transportation | 239 | 17,484 | 641 | 18,364 |
| Natural Resources | 3,616 | 1,622 | 1,399 | 6,636 |
| Environmental Protection | 123 | 3,174 | 18 | 3,316 |
| Health and Human Services | 44,808 | 25,602 | - | 70,410 |
| Corrections and Rehabilitation | 13,353 | 2,576 | - | 15,929 |
| K-12 Education | 48,067 | 127 | 1,541 | 49,736 |
| Higher Education | 15,795 | 180 | 723 | 16,698 |
| Labor and Workforce Development | 159 | 848 | - | 1,007 |
| Government Operations | 1,578 | 351 | 8 | 1,937 |
| General Government | | | | |
| Non-Agency Departments | 908 | 1,873 | 8 | 2,789 |
| Tax Relief/Local Government | 1,182 | 2,774 | - | 3,956 |
| Statewide Expenditures | -791 | 801 | 1 | 11 |
| Total | \$133,900 | \$62,115 | \$6,059 | \$202,074 |

Note: Numbers may not add due to rounding.

General Fund Revenue Sources

(Dollars in Millions)

| | 2019-20 | 2020-21 | Change from 2019-20 | |
|---|------------------|------------------|---------------------|----------------|
| | | | Dollar Change | Percent Change |
| Personal Income Tax | \$95,566 | \$77,567 | -\$17,999 | -18.8% |
| Sales and Use Tax | 24,941 | 20,583 | -4,358 | -17.5% |
| Corporation Tax | 13,870 | 16,534 | 2,664 | 19.2% |
| Insurance Tax | 3,052 | 2,986 | -66 | -2.2% |
| Alcoholic Beverage Taxes and Fees | 385 | 389 | 4 | 1.0% |
| Cigarette Tax | 58 | 56 | -2 | -3.2% |
| Motor Vehicle Fees | 31 | 40 | 9 | 27.4% |
| Other | 1,842 | 11,758 | 9,916 | 538.3% |
| Subtotal | \$139,745 | \$129,913 | -\$9,832 | -7.0% |
| Transfer to/from the Budget Stabilization Account/Rainy Day Fund | -2,120 | 7,806 | 9,926 | 468.2% |
| Total | \$137,625 | \$137,719 | \$94 | 0.1% |

Note: Numbers may not add due to rounding.

2020-21 Revenue Sources

(Dollars in Millions)

| | General Fund | Special Funds | Total | Change From 2019-20 |
|---|------------------|-----------------|------------------|---------------------|
| Personal Income Tax | \$77,567 | \$1,874 | \$79,441 | -\$18,601 |
| Sales and Use Tax | 20,583 | 10,025 | 30,608 | -4,644 |
| Corporation Tax | 16,534 | - | 16,534 | 2,665 |
| Highway Users Taxes | - | 8,124 | 8,124 | 324 |
| Insurance Tax | 2,986 | - | 2,986 | -66 |
| Alcoholic Beverage Taxes and Fees | 389 | - | 389 | 4 |
| Cigarette Tax | 56 | 1,848 | 1,904 | -21 |
| Motor Vehicle Fees | 40 | 10,004 | 10,044 | 585 |
| Other | 11,758 | 20,490 | 32,248 | 4,614 |
| Subtotal | \$129,913 | \$52,365 | \$182,278 | -\$15,140 |
| Transfer to/from the Budget Stabilization Account/Rainy Day Fund | 7,806 | -7,806 | - | - |
| Total | \$137,719 | \$44,559 | \$182,278 | -\$15,140 |

Note: Numbers may not add due to rounding.

SAVING LIVES AND EMERGENCY RESPONSE

As of late June, COVID-19 resulted in over 125,000 deaths in the United States, and more than 5,900 in California. Since the initial outbreak, the Administration has taken action to reduce the spread of the virus, becoming the first in the nation to implement a statewide stay-at-home requirement to mitigate the spread of COVID-19.

RESPONDING TO COVID-19

In early March, the Governor proclaimed a state of emergency for the novel coronavirus outbreak. Within two weeks, the Administration issued the statewide stay-at-home order. Even prior to these actions, the State Operations Center had been activated, informed by the state's public health officers, to prepare for an expected surge of patients infected with the virus. Based on data from medical models, projections indicated that hospitals would be inundated with patients, outstripping medical resources both in terms of available beds as well as the staffing and supplies needed to care for them. Necessary actions to address the immediate needs for various vulnerable populations and healthcare workers were identified and taken, and local governments were provided state assistance to stop the spread of COVID-19 and mitigate the impacts. In addition, food banks were supported and staffed as the demand for these services began to increase.

Moving forward, the state continues to take action to safely reopen the state's economy based on six specific indicators informed by science and public health

guidance. This approach necessitates the continuation of the state's proactive measures to mitigate potential outbreaks and surges in positive cases and hospitalizations. The state is now better prepared for a potential resurgence of positive cases and increased pressure on the state's health care system. The state has procured personal protective equipment, issued public health guidance, is expanding contract tracing programs, and made other preparations to strengthen hospital capacity and protect vulnerable populations.

The state has also developed a data portal for the public—<https://covid19.ca.gov/roadmap-counties/>—which reflects information by county to better understand local COVID-19 statistics. With a focus on health equity, the state continues to monitor data and make adjustments to both guidance and support to respond to the changing conditions of the COVID-19 pandemic.

Pursuant to a Presidential Disaster declaration, funds from the Federal Emergency Management Agency (FEMA) became available to help pay for the state's response efforts. The Budget reflects \$5.7 billion in estimated planned expenditures for the state's direct emergency response efforts for the COVID-19 pandemic. We expect that the federal government will reimburse the majority of these expenditures. Also, to prepare for needs that may occur in the coming months, the Budget sets aside \$716 million General Fund within the Special Fund for Economic Uncertainties.

COVID-19 FEDERAL ASSISTANCE

The federal government has provided temporary federal funding to support the state's response to the COVID-19 pandemic. This funding was made available through four federal bills to help pay for emergency response, testing and contact tracing, health care, and financial relief to individuals, families, and businesses as well as state and local governments, including schools and higher education institutions. The following summarizes the four bills passed by Congress since March 2020:

- **Coronavirus Preparedness and Response Supplemental Appropriations Act (HR 6074)**—Provided emergency funding for public health and health care.
- **Families First Coronavirus Response Act (HR 6201)**—Provided some early assistance to families and temporarily increased the federal match for some state programs including Medi-Cal and In-Home Supportive Services. Federal funding was also extended for testing and testing-related services for uninsured individuals.

- **Coronavirus Aid, Relief, and Economic Security (CARES) Act (HR 748)**—Broadened the assistance available to include funding for states, local governments, education, child care, individuals and families. Funding was also expanded, extended, and supplemented for unemployment insurance benefits. Finally, this measure provided assistance to businesses, including the health care sector, small businesses, farmers, airports, and transit agencies.
- **Paycheck Protection Program and Health Care Enhancement Act (HR 266)**—Expanded funding for small businesses, hospitals, community and rural health centers, and substantially expanded funding for testing and contact tracing to support reopening businesses and the economy.

As of late June, California expects to receive over \$72 billion in assistance to state programs. Unemployment insurance represents about \$52 billion of this total. In addition, over \$142 billion in direct assistance is expected to be provided to individuals and families, small businesses, hospitals and providers, including rural and community clinics, higher education institutions and college students, local housing authorities, airports, farmers, and local government. Funds identified to date are detailed in the chart below:

Summary of Federal Stimulus Funds

(Dollars in Thousands)

| Federal Vehicle | To/Thru State | Direct Stimulus | Total |
|---|---------------------|----------------------|----------------------|
| Preparedness and Response (HR 6074) | \$63,754 | \$1,535,765 | \$1,599,519 |
| Families First (HR 6201) | 11,460,393 | 2,726,574 | 14,186,967 |
| CARES Act (HR 748) | 60,197,032 | 81,702,154 | 141,899,186 |
| Payroll Protection/Health Care (HR 266) | 499,203 | 56,117,934 | 56,617,137 |
| Total | \$72,220,382 | \$142,082,427 | \$214,302,809 |

CORONAVIRUS RELIEF FUND

The CARES Act allocated Coronavirus Relief Funds (CRF) to state and local governments for expenditures incurred between March 1, 2020 and December 30, 2020 in response to COVID-19, not previously accounted for in the most recent state and local budgets.

Based on the state’s population, California received a total of \$15.3 billion with \$9.5 billion paid to the state. Cities and counties with populations over 500,000 (15 counties, city and county of San Francisco, and 5 cities) received \$5.8 billion directly from the U.S. Treasury. The funding allocated to five large cities was deducted from the county share.

The \$9.5 billion in state CRF allocations are summarized in the following chart:

Coronavirus Relief Fund Allocations

(Dollars in Thousands)

| State Directed Coronavirus Relief Fund Allocations | Amount |
|---|--------------------|
| State Offsets: Vulnerable Populations and Public Safety | \$2,692,681 |
| Housing for Homeless Individuals and Families | \$550,000 |
| K-14 Learning Loss Mitigation | 4,493,819 |
| County Homelessness, Public Health, Public Safety, and Other Services | 1,289,065 |
| City Homelessness, Public Health, Public Safety, and Other Services | 500,000 |
| Total | \$9,525,565 |

DEPARTMENT OF PUBLIC HEALTH

The Department of Public Health has continued to be at the forefront of the state’s response to the COVID-19 pandemic—extensively planning for, preparing for, and responding to the pandemic since mid-January.

The Budget maintains and increases the Department’s ongoing disease surveillance and identification workforce. Specifically, the Budget includes \$5.9 million General Fund for 2020-21 and \$4.8 million General Fund ongoing, to support state laboratory staff and to purchase equipment and laboratory supplies. In addition, the Budget includes ongoing funding for infectious disease prevention and control that had previously been scheduled for suspension on January 1, 2022.

In early April, the Governor announced the COVID-19 Testing Task Force, a public-private collaborative charged with boosting California’s testing capacity. The task force efforts have led to significant increases in testing, improvements to the supply chain for testing supplies, and the establishment of specimen collection sites across the state, including mobile labs. In addition, the State has built up significant testing capacity in partnership with private and public laboratories, including high throughput capacity to improve the turnaround time for test results.

California is now completing more than 80,000 COVID-19 tests per day, but more work is necessary to reduce the cost of testing, create more equitable access to testing, and improve disease surveillance. Control Section 11.95 will allow for the allocation of more than \$600 million in federal funds to support testing and contact tracing.

In the ongoing effort to mitigate the spread of COVID-19, the Administration launched California Connected, the state's effort to greatly expand county contact tracing programs, which redirects state employees to begin contact tracing efforts. This effort includes contracts with the University of California, San Francisco and University of California, Los Angeles to launch an online training academy to develop a culturally competent and skilled contact tracing workforce.

ENHANCING EMERGENCY RESPONSES AND PREPAREDNESS

In response to the global COVID-19 pandemic, the state has had to implement an unprecedented emergency response effort necessary to protect the health of Californians. However, the state remains at risk from other types of emergencies. The Budget continues the Administration's prioritization of enhancing emergency response and preparedness.

OFFICE OF EMERGENCY SERVICES

The Budget reflects \$117.6 million for the Office of Emergency Services (Cal OES) to enhance the state's emergency preparedness and response capabilities.

- **Community Power Resiliency**—\$50 million one-time General Fund to support additional preparedness measures that bolster community resiliency. Building on this year's investments, these measures will support critical services still vulnerable to power outage events, including schools, county election offices, and food storage reserves.
- **California Disaster Assistance Act (CDAA)**—\$38.2 million one-time General Fund to increase the amount of funding available through the CDAA, which is used to repair, restore, or replace public real property damaged or destroyed by a disaster or to reimburse local governments for eligible costs associated with emergency activities undertaken in response to a state of emergency proclaimed by the Governor. This augmentation increases total CDAA funding available in the Budget to \$100.8 million.
- **California Earthquake Early Warning Program**—\$17.3 million, supported by a one-time loan of the same amount from the School Land Bank Fund, to operate this new, innovative program that uses science, monitoring, and technology to alert people, businesses, and transit agencies via devices before the anticipated strongest seismic activity arrives.

- **California Cybersecurity Integration Center**—\$11.1 million General Fund in 2020-21 for various departments (including \$7.6 million General Fund in 2020-21 for Cal OES), to enhance the state's critical cybersecurity infrastructure. This investment will provide a full-time Joint Incident Response Team to bolster the state's capabilities in preventing, mitigating, and responding to cyberattacks.
- **Seismic Safety Commission Transfer**—\$2.5 million (\$503,000 General Fund) to transfer the Seismic Safety Commission to Cal OES. These resources will be critical to supporting the effective integration of the Seismic Safety Commission into Cal OES, resulting in increased coordination with other components of the state's multi-hazard strategy, earthquake preparedness, and broader distribution of seismic safety policies and recommendations.
- **Wildfire Forecast and Threat Intelligence Integration Center**—\$2 million General Fund ongoing to enhance the state's emergency response capabilities through improved forecasts for tracking and predicting critical fire weather systems, which improves situational awareness of fire threat conditions in real-time, consistent with Chapter 405, Statutes of 2019 (SB 209).

DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Over the past several years, the state has experienced unprecedented increases in wildfire activity driven by climate change. Furthermore, 2020 is likely to be an active fire year, as evidenced by year-to-date fire activity, given lower than average precipitation, snowpack, and fuel moisture levels.

The Budget reflects \$90 million General Fund (\$93.2 million General Fund ongoing) to further enhance CAL FIRE's fire protection capabilities.

- **CAL FIRE Relief Staffing and Additional Surge Capacity**—\$85.6 million General Fund ongoing for additional firefighting resources to provide CAL FIRE with operational flexibility throughout the peak fire season and beyond as fire conditions dictate. These resources will be leveraged to provide relief for frontline firefighting staff, which will directly benefit employee health and wellness. Additionally, these resources will serve as an immediate resource pool to be deployed strategically, based on fire risk, to build CAL FIRE's surge capacity by staffing additional engines during the late fall, winter, and early spring, and adding a fourth firefighter on a portion of engines.

- **Innovation Procurement Sprint**—\$4.4 million General Fund (\$7.6 million ongoing) to enable CAL FIRE to implement the new, pioneering wildfire prediction and modeling technology that was procured through the Innovation Procurement Sprint process initiated through Executive Order N-04-19. The recently-executed contract will enable CAL FIRE to access a wildfire predictive software program that can perform hundreds of millions of simulations daily, over large geographic areas, and generate predictions and wildfire forecasts based on simulated or reported ignition points throughout the state. The data from this software program will be used to inform fire pre-positioning and suppression tactical operations, with the intent to more readily control and contain wildfires, and to protect people and assets at risk.

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ENCOURAGING RECOVERY

Until February, California enjoyed an historic economic expansion that reduced unemployment from a peak of 12.3 percent to 3.9 percent, and lowered the poverty rate from a peak of over 16 percent to under 12 percent. Real per capita personal income had increased by almost 25 percent between 2007 and 2018. This strong economic growth enabled billions of dollars in investments to improve schools and roads, to increase access to and affordability of higher education, to create a robust state earned income tax credit program, and to steadily increase the state's minimum wage. But even during this period of expansion, growth was uneven and unequal, and too many people continued to struggle to make ends meet.

The COVID-19 Recession ended the longest recovery period in the state's history. The ensuing recession has caused massive job losses, precipitous drops in family and business income, and has exacerbated inequality. The May Revision forecast included a peak unemployment rate of 24.5 percent in the second quarter of this year and a decline in personal income of nearly 9 percent in 2020. The official unemployment rate exceeded 16 percent in April and May.

Since February, more than 1 million Californians have left the labor force, meaning they are no longer employed nor actively searching for work. Including those individuals, as well as reclassifying employees who had been furloughed without pay, would increase the unemployment rate to close to the May Revision forecast. Although there are signs of improvement as businesses reopen, there were fewer than 15.5 million employed Californians in May, the lowest level since April 1999.

ENCOURAGING RECOVERY

The Budget enacts policies and investments to encourage recovery for all Californians. With additional funding and policy changes at the federal level, there are greater opportunities for state and local government to shape a safe, swift recovery that will promote greater resilience and sustainability.

REVENUE SOLUTIONS

The Budget maintains three tax measures included in the Governor's Budget:

- Extending the sales tax exemption for diapers and menstrual products through the end of 2022-23.
- Extending the carryover period for film credits from 6 years to 9 years.
- Extending the current exemption from the minimum tax for first year corporations to first year Limited Liability Corporations, partnerships, and Limited Liability Partnerships.

In addition, the Earned Income Tax Credit (EITC) has been expanded to taxpayers that use an Individual Taxpayer Identification Number (ITIN) rather than a Social Security number for taxpayers with at least one child age 5 or younger.

As part of a balanced approach to managing the budget deficit, the Budget also includes two significant temporary changes to tax law, as well as a measure to reduce the sales tax gap. These measures are intended to raise revenue, stimulate economic growth, and help those in need. They are:

- Suspending Net Operating Losses for 2020, 2021, and 2022 for medium and large businesses.
- Limiting business incentive tax credits from offsetting more than \$5 million of tax liability for 2020, 2021, and 2022.
- Requiring used car dealers to remit sales tax to the Department of Motor Vehicles with the registration fees.

These revenue measures net \$4.3 billion in 2020-21, \$3.1 billion in 2021-22 and \$1.3 billion in 2022-23.

While the Budget does not include a new tax on e-cigarettes based on nicotine content, the Administration remains committed to working with the Legislature to enact this measure.

Changes in Revenues
(Benefit to General Fund, Dollars in Millions)

| | 2020-21 | 2021-22 | 2022-23 |
|--|----------------|----------------|----------------|
| Suspend Net Operating Losses for 2020, 2021, and 2022 | \$1,820 | \$1,300 | \$380 |
| Limit Business Incentive Tax Credits to Offset no more than \$5 million of Tax Liability Per Year for 2020, 2021, and 2022 | 1,955 | 1,505 | 890 |
| Interaction Between NOL Suspension and Credit Limitation | 611 | 454 | 206 |
| Require Used Car Dealers to Remit Sales Tax to DMV with Registration Fees | 12 | 24 | 24 |
| Expand EITC to ITIN taxpayers with children age 5 or younger | -65 | -60 | -60 |
| New May Revision General Fund Revenue Solutions | \$4,333 | \$3,223 | \$1,440 |
| Provisions included in Governor's Budget | | | |
| Extension of Sales Tax Exemption for Diapers and Menstrual Products through 2022-23 | 0 | -23 | -46 |
| Extend the First Year Exemption from Minimum Tax to LLCs, Partnerships, and LLPs | -50 | -100 | -100 |
| Extend Carryover Period for Program 2.0 Film Credits from 6 years to 9 years | 0 | 0 | -1 |
| General Fund Revenue Solutions | \$4,283 | \$3,100 | \$1,293 |

SUPPORTING THE RECOVERY OF SMALL BUSINESS

Small businesses are the core of California's economy—nearly 4 million businesses employ approximately half of the private workforce.

Small businesses have suffered massive losses as a result of the COVID-19 Recession and they are facing increased costs to modify their operations in order to reduce the transmission of COVID-19. Given their critical role in California's economy, the Budget increases funding to support the recovery of this sector in the near- and long-term.

MINIMUM FRANCHISE TAX

To support new business creation and innovation, the Budget waives the \$800 minimum franchise tax—often a costly barrier for start-up businesses—for the first year of operation.

SMALL BUSINESS LOAN GUARANTEES

The California Infrastructure and Economic Development Bank's (IBank) Small Business Finance Center manages California's small business loan guarantees, disaster loan guarantees, and direct lending programs. The Budget includes \$50 million additional

ENCOURAGING RECOVERY

General Fund to provide a total of \$100 million General Fund for the Small Business Finance Center to address gaps in available federal assistance and grow California's program. This increase will be leveraged to access existing private lending capacity and philanthropic funding to increase the funds available to provide necessary capital to restart California small businesses.

Further, the Budget includes \$25 million General Fund for IBank to provide capital to Community Development Financial Institutions (CDFIs) and other mission based lenders to enable the origination of more loans in underbanked communities. IBank works with the CDFI network to serve economically disadvantaged small businesses, including the underbanked and unbanked. This funding will increase liquidity and available capital in these areas.

As part of the federal Payroll Protection Program, over 750,000 California small businesses have received a combination of grants and loans totaling over \$85 billion primarily to support continued payment of employees and to help overcome the temporary loss of revenue they are experiencing. While these amounts are significant, the awards to date benefit less than 20 percent of California's 4 million small businesses. The recently enacted Paycheck Protection Flexibility Act of 2020 (HR 7010) extends the time to spend funds from 8 to 24 weeks, reduces the percentage of funds required to be spent on payroll from 75 percent to 60 percent, and provides more time to return to pre-COVID-19 staffing levels.

SMALL BUSINESS AND ECONOMIC DEVELOPMENT

To further support the needs of underserved communities and direct small businesses to capital options, California helps fund a network of federally contracted centers to consult and train California small business owners. The Governor's Office of Business and Economic Development administers a grant program that funds business technical assistance centers to expand services to underserved small businesses, and the Capital Infusion Program to help small businesses access capital.

The Budget includes an investment of \$758,000 ongoing General Fund for four positions to bring business and economic development to Inland and Northern California.

SUPPORTING JOB CREATION

This Budget includes measures to support job creation including: assistance to help spur the recovery of small businesses and the jobs they create, support for increased housing

affordability and availability, and investments in human and physical infrastructure. The investments and actions will focus on equity, shared prosperity and long-term growth.

The Governor has also convened a Task Force on Business and Jobs Recovery—a diverse group of leaders from business, labor, and the non-profit sector—to develop actionable recommendations and advise the state on how economic recovery can be expedited and address the effects of wage disparity that are being made even worse by the COVID-19 Recession. The Administration is committed to additional actions, informed by the Legislature, the Governor's Council of Economic Advisers, the Task Force, and other stakeholders to support a safe, swift and equitable economic recovery.

TRANSPORTATION INVESTMENTS

In the immediate term, the Department of Transportation (Caltrans) will accelerate projects to achieve cost savings, support the creation of new jobs in the transportation sector, and improve roads. The Federal Highway Administration estimates that approximately 13,000 jobs are created for every billion dollars spent on highway infrastructure. While fuel tax revenues used to fund transportation projects are expected to decline by a total of \$1.8 billion through 2024-25, the Budget maintains current planning and engineering staffing levels to continue developing and designing previously programmed projects. Not only does Caltrans plan to award all of the projects it currently has programmed for construction in the coming year, but the continued project development work will support preparedness for when additional stimulus funding becomes available.

HOUSING

The COVID-19 pandemic and resulting recession has impacted vulnerable communities and made the housing shortage crisis more acute. In response, the Budget prioritizes expanded state tax credits and maximizing federal funds to focus on housing.

This builds upon the Governor's series of actions earlier this year to temporarily halt evictions statewide and financial institutions' foreclosure proceedings. Additionally, the federal government has prohibited federally backed mortgage lenders from initiating foreclosure proceedings for 60 days and provided certain homeowners a right of forbearance for 180 days due to COVID-19-related financial hardships.

LOW-INCOME HOUSING TAX CREDITS

The 2019 Budget Act provided expanded state tax credits for low-income housing that pair with a federal 4-percent tax credit. With continued increased demand for these tax credits, the Budget allocates up to \$500 million in additional tax credits in 2021, provided the committees involved in the tax credit allocation process, the California Debt Limit Allocation Committee and the California Tax Credit Allocation Committee, adopt regulations that further align their programs to continue to increase production, contain costs, and take into consideration maximizing the efficient use of public subsidies and benefits that would be created. New data collection and reporting requirements are also included.

Other Significant Adjustments

- **Mixed-Income Program**—The 2019 Budget Act included a one-time \$500 million General Fund investment to the California Housing Finance Agency (CalHFA) over four years for mixed-income development loans (between 30 and 120 percent of the Area Median Income) at a lower subsidy level than traditional state programs. This investment served to help a target population that had not been assisted by other state housing programs. The Budget reverts \$45 million planned for expenditure in 2020-21, that will be restored, should federal funds become available by October 15, 2020. In addition, there also remains a dedicated annual revenue provided by real estate transaction fees (estimated at \$40 million in 2020-21) and up to \$200 million in state low-income housing tax credits to help develop moderate income housing.
- **Infill Infrastructure Grants**—The 2019 Budget Act also provided \$500 million General Fund in grants for necessary infill infrastructure improvements that will stimulate and facilitate residential or mixed-use development. The Budget reverts \$203 million of this one-time investment. To the extent the federal government provides sufficient federal funds by October 15, 2020, this funding will be restored. The Department of Housing and Community Development also has \$300 million in Proposition 1 bond funds for infill infrastructure grants.

NATIONAL MORTGAGE SETTLEMENT RELIEF

As California homeowners and renters struggle to make payments during this time, the Budget provides \$331 million in National Mortgage Settlement funds to help prevent avoidable foreclosures and evictions. Of this amount, \$300 million will be available for

housing counseling as well as mortgage assistance through CalHFA. Specifically, CalHFA will partner with U.S. Department of Housing and Urban Development certified counselors to help homeowners, former homeowners, and renters take advantage of rights and resources available to them. Additionally, CalHFA will provide mortgage assistance to help qualified residential mortgage borrowers avoid defaults on their payments and maintain ownership of their homes and buildings. The remaining \$31 million will provide legal assistance and counseling for renters and homeowners through Judicial Branch grants to local legal service organizations throughout the state.

Housing production and affordability remains a priority for the Administration. With strategic funding to maintain fiscal sustainability while making impactful long-term investments, the 2020 Budget includes \$8.3 billion across multiple departments and programs to address housing throughout the state.

2020-21 Affordable Housing Funding
(Dollars in Millions)

| <i>Department</i> | <i>Program</i> | <i>Amount</i> |
|---|--|-------------------------|
| Department of Housing and Community Development | Federal Funded Programs for Housing | \$1,276.0 ^{1/} |
| | Veterans and Affordable Housing Bond Act Programs (Prop 1) | \$630.0 |
| | No Place Like Home Program | \$400.0 |
| | Building Homes and Jobs Fund Programs (SB 2) | \$277.0 |
| | Veterans Housing and Homelessness Prevention | \$75.0 |
| | Various | \$43.0 |
| California Housing Finance Agency ^{2/} | Single Family First Mortgage Lending | \$2,500.0 |
| | Multifamily Conduit Lending | \$600.0 |
| | National Mortgage Settlement (Mortgage Counseling and Assistance) | \$300.0 |
| | Multifamily Permanent Lending | \$140.0 |
| | Mixed-Income Loan Program | \$90.0 ^{3/} |
| | Single Family Down Payment Assistance (SB 3) | \$85.0 |
| | Special Needs Housing Program | \$25.0 ^{4/} |
| Tax Credit Allocation Committee | Low Income Housing Tax Credits (Federal) | \$436.0 ^{5/} |
| | Low Income Housing Tax Credits (State) | \$602.0 |
| | Farmworker Housing Assistance Tax Credits | \$4.0 |
| Strategic Growth Council | Affordable Housing and Sustainable Communities | \$452.0 ^{6/} |
| Department of Veterans Affairs | CalVet Farm and Home Loan Program (SB 3) | \$170.0 |
| Office of Emergency Services | Domestic Violence Housing First Program | \$23.0 |
| | Transitional Housing Program | \$18.0 |
| | Specialized Emergency Housing | \$10.0 |
| | Domestic Violence Assistance, Equality in Prevention and Services, Human Trafficking Victim Assistance, North American Domestic Violence and Sexual Assault | - ^{7/} |
| Judicial Council | National Mortgage Settlement (Renter and Homeowner Legal Assistance) | \$31.0 |
| California Department of Corrections and Rehabilitation | Specialized Treatment of Optimized Programming, Parolee Service Center, Day Reporting Center, Female Offender Treatment and Employment Program, Proposition 47 Grant Program | - ^{7/} |
| Department of Social Services | CalWORKS Family Stabilization, Housing Component | \$4.9 ^{8/} |
| | CalWORKS Housing Support Program | \$95.0 |
| Department of Public Health | HIV Care Program | - ^{7/} |
| | Housing Opportunities for Persons with AIDS (HOPWA) | \$5.0 |
| | Housing Plus Program | \$1.0 |
| Total | | \$8,292.9 |

1/ This amount reflects programs that receive federal funds, such as the Community Development Block Grant program. Unawarded COVID-19 related relief funds (e.g., CARES Act) are not reflected.

2/ Amount is based on lending activities from 2018/19.

3/ An additional \$45 million may become available in federal funds for this program.

4/ Amount represents voluntary allocations of local Proposition 63 funds from 16 participating counties.

5/ This represents the estimated 9 percent tax credits to be allocated in 2020, including an increase for disaster credits provided by the federal government, and the estimated amount of 4 percent credits to be awarded in 2020 based on current data and remaining bond cap.

6/ The Affordable Housing and Sustainable Communities program amount reflects 20 percent of the projected Cap and Trade revenues. The Transformative Climate Communities (TCC) program (\$44.6 million in carryover available for 2020-21) funds various activities, including affordable housing.

7/ The State provides a number of wrap-around supportive services through these programs including housing, which cannot be separated from the program's overall budget.

8/ Of the \$46.9 million available for CalWORKs Family Stabilization in 2020-21, \$4.9 million is estimated to be spent on housing.

SUPPORTING THE RECOVERY

The CARES Act provides temporary program enhancements and expanded unemployment insurance benefits to millions of workers no longer employed due to the COVID-19 Recession. Most notably, the CARES Act included a federally funded temporary emergency benefit increase of \$600 per week through July 31, 2020 and a federally funded Pandemic Unemployment Assistance program to provide up to 39 weeks of unemployment insurance benefits to individuals who do not qualify for traditional unemployment compensation, including business owners, the self-employed, independent contractors, individuals with limited work history, and other individuals not usually eligible for regular state unemployment insurance benefits who are unemployed as a direct result of the COVID-19 Recession. From March until mid-June, over \$37 billion has been paid out through these expanded unemployment insurance programs.

The Short-Term Compensation program included in the CARES Act is another benefit that helps employers retain workers at reduced time and wages—ready to restart operations once stay-at-home orders are eased. Unlike regular unemployment insurance, these benefits are fully funded for up to 26 weeks by the federal government through the end of 2020. It is intended to support businesses in retaining their workers as the economy reopens and customers come back. The Administration is working to address the cumbersome process that has delayed enrollment to increase the number of businesses participating in this program.

Finally, \$27.9 billion in direct economic impact payments from the U.S. Treasury has been allocated to nearly 16.9 million California families who have filed a federal tax return in 2018 or 2019, as well as individuals who receive Social Security retirement, SSDI, Railroad Retirement benefits, SSI and Veterans Affairs beneficiaries who have not filed a tax return in the last two years.

A STRONGER, MORE INCLUSIVE ECONOMY

While average per capita income had increased almost 25 percent in real terms from 2007 to 2018, median household income was flat over the same period. Most of the jobs added since the Great Recession were in lower-wage sectors. Job growth was also uneven across regions. Income inequality persisted, and prosperity was not shared by all regions of the state.

The COVID-19 Recession is disproportionately impacting low-wage workers and communities of color, and worsening inequality and opportunity. Informed by the Future of Work Commission, and advised by the Task Force on Business and Jobs

ENCOURAGING RECOVERY

Recovery and the Governor's Council of Economic Advisers, the Administration will continue to work on actions to protect those facing the greatest hardships from the COVID-19 Recession. It will also work on tangible actions to broaden opportunity, better prepare the state's workforce, and modernize worker safety net protections.

The California state minimum wage increased by \$1 per hour on January 1, 2020 to reach \$12 per hour for businesses with 25 or fewer employees, and \$13 per hour for businesses with 26 or more employees. These increases will affect roughly 60 percent of Californians. Annual increases of \$1 per hour are scheduled to continue until the statewide minimum wage reaches \$15 per hour for everyone, with indexing for inflation after that. The Budget maintains these scheduled increases.

The 2019 Budget Act significantly expanded the EITC beginning in tax year 2019, by more than doubling the existing credit from \$400 million to \$1 billion. The expanded program extends credits to 1 million additional households, raising the number of households receiving the credit to 3 million. The expanded credit includes a \$1,000 credit for every family that otherwise qualifies for the credit and has at least one child age 5 and under. The Budget continues the EITC at this expanded level and extends the EITC to more Californian taxpayers including those who file using ITIN and have at least one child age 5 or younger. This expansion allows more families with young children to receive additional help to address the costs of food, rent, and other basic necessities.

The Budget also maintains increased resources to protect employees and address the misclassification of employees.

K-12 EDUCATION

California provides instruction and support services to roughly six million students in grades kindergarten through twelve in more than 10,000 schools throughout the state. A system of 58 county offices of education, 1,000 local school districts, and more than 1,200 charter schools provides students with instruction in English, mathematics, history, science, and other core competencies to enable them to develop the skills they will need upon graduation for either entry into the workforce or higher education.

The Budget includes total funding of \$98.8 billion (\$48.1 billion General Fund and \$50.7 billion other funds) for all K-12 education programs.

PROPOSITION 98

Proposition 98 is a voter-approved constitutional amendment that guarantees minimum funding levels for K-12 schools and community colleges. The Guarantee, which went into effect in the 1988-89 fiscal year, determines funding levels according to multiple factors including the level of funding in 1986-87, General Fund revenues, per capita personal income, and school attendance growth or decline. The Local Control Funding Formula is the primary mechanism for distributing these funds to support all students attending K-12 public schools in California.

The COVID-19 Recession has heavily impacted the economy and the state's General Fund revenues, creating a parallel negative impact on the state's K-14 Proposition 98 Guarantee. The Budget estimates Proposition 98 levels of \$78.5 billion, \$77.7 billion, and

\$70.9 billion in 2018-19, 2019-20, and 2020-21. For K-12 schools, this results in Proposition 98 per pupil spending of \$10,654 in 2020-21—a \$1,339 decrease over the 2019-20 per pupil spending levels. Additionally, in the same period, per pupil spending from all state, federal, and local sources decreased by approximately \$542 per pupil to \$16,881.

ADDRESSING IMMEDIATE NEEDS AND AVOIDING PERMANENT DECLINE

To help mitigate the negative impacts of the state's revenue decline on funding for K-12 schools and California Community Colleges, the Budget includes the following:

DEFERRALS

The COVID-19 Recession requires \$1.9 billion of Local Control Funding Formula (LCFF) apportionment deferrals in 2019-20, growing to \$11 billion LCFF apportionment deferrals in 2020-21. These deferrals will allow LCFF funding to remain at 2019-20 levels in both fiscal years; the Budget suspends the statutory LCFF cost-of-living adjustment in 2020-21. Of the total deferrals, \$5.8 billion will be triggered off in 2020-21 if the federal government provides sufficient funding that can be used for this purpose.

LEARNING LOSS MITIGATION

The Budget includes a one-time investment of \$5.3 billion (\$4.4 billion federal Coronavirus Relief Fund, \$539.9 million Proposition 98 General Fund, and \$355.2 million federal Governor's Emergency Education Relief Fund) to local educational agencies to address learning loss related to COVID-19 school closures, especially for students most heavily impacted by those closures.

Funds will be allocated to local educational agencies on an equity basis, with an emphasis on ensuring the greatest resources are available to local educational agencies serving students with the greatest needs. The funds are intended to track and mitigate the inequitable impact that the COVID-19 pandemic has had on different student populations, including low-income students and students with disabilities. Specifically, funds will be allocated in the following manner:

- \$2.9 billion based on the LCFF supplemental and concentration grant allocation.
- \$1.5 billion based on number of students with exceptional needs.

- \$979.8 million based on total LCFF allocation.

Funds may be used for:

- Learning supports that begin prior to the start of the school year, and the continuing intensive instruction and supports into the school year.
- Extending the instructional school year, including an earlier start date, by increasing the number of instructional minutes or days.
- Providing additional academic services for pupils, including diagnostic assessments of student learning needs, intensive instruction for addressing gaps in core academic skills, additional instructional materials or supports, or devices and connectivity for the provision of in-classroom and distance learning.
- Providing integrated student supports to address other barriers to learning, such as the provision of health, counseling or mental health services; professional development opportunities to help teachers and parents support pupils in distance-learning contexts; access to school breakfast and lunch programs; or programs to address student trauma and social-emotional learning.

SUPPLEMENTAL APPROPRIATIONS

In 2019-20 and 2020-21, the Proposition 98 funding level drops below the target funding level (Test 2), by a total of approximately \$12.4 billion. To accelerate the recovery from this funding reduction, the Budget provides supplemental appropriations above the constitutionally-required Proposition 98 funding level, beginning in 2021-22, and in each of the next several fiscal years, in an amount equal to 1.5 percent of General Fund revenues per year, up to a cumulative total of \$12.4 billion. This appropriation will accelerate growth in the Guarantee, which the Administration proposes to increase as a share of the General Fund. Currently, Proposition 98 guarantees that K-14 schools receive approximately 38 percent of the General Fund in Test 1 years. The Budget increases this share of funding to 40 percent by 2023-24.

REVISED CALPERS AND CALSTRS CONTRIBUTIONS

To provide local educational agencies with increased fiscal relief, the Budget redirects \$2.3 billion appropriated in the 2019 Budget Act to CalSTRS and CalPERS for long-term unfunded liabilities to reduce employer contribution rates in 2020-21 and 2021-22. This reallocation will further reduce the CalSTRS employer rate from 18.41 percent to

approximately 16.15 percent in 2020-21 and from 17.9 percent to 16.02 percent in 2021-22. The CalPERS Schools Pool employer contribution rate will be further reduced from 22.67 percent to 20.7 percent in 2020-21 and from 24.6 percent to 22.84 percent in 2021-22.

FEDERAL FUNDS

In addition to the federal Coronavirus Relief Fund and Governor's Emergency Education Relief Fund allocated to K-12 education above, the Budget appropriates \$1.6 billion in federal Elementary and Secondary School Emergency Relief funds that California was recently awarded. Of this amount, 90 percent (\$1.5 billion) will be allocated to local educational agencies in proportion to the amount of Title I-A funding they receive to be used for COVID-19 related costs. The remaining 10 percent (\$164.7 million) is available for COVID-19 related state-level activities, as follows:

- \$112.2 million to provide up to \$0.75 per meal for local educational agencies participating in the National School Lunch Program, School Breakfast Program, Seamless Summer Option, or Summer Food Service Program and serving meals between March 2020 and August 2020 due to physical school closures caused by the COVID-19 pandemic. These funds will enable local educational agencies to address food insecurity in their communities, especially for students and families who rely on school meals.
- \$45 million for grants to local educational agencies, including county offices of education, to coordinate or expand community schools to increase access to health, mental health, and social service supports for high-needs students. These funds will enable improved delivery of mental health and social-emotionally supportive services for students experiencing the stress, anxiety, and trauma caused by the COVID-19 pandemic.
- \$6 million for the University of California Subject Matter Projects to provide educator professional development for providing high-quality distance learning and addressing learning loss in mathematics, science, and English language arts due to the COVID-19 pandemic.
- \$1.5 million for the Department of Education for state operations costs associated with the COVID-19 pandemic.

TEMPORARY REVENUE INCREASES

The Budget proposes the temporary three-year suspension of net operating losses and limitation on business incentive tax credits to offset no more than \$5 million of tax liability per year. This, along with other tax changes, generates a net \$4.3 billion in General Fund revenues and approximately \$1.6 billion in benefit to the Proposition 98 Guarantee.

SPECIAL EDUCATION

The Budget increases special education resources and creates new mechanisms to improve special education financing, programs, and student outcomes. Specifically, the Budget increases special education base rates to \$625 per pupil pursuant to a new funding formula, apportioned using the existing hold harmless methodology, and provides \$100 million to increase funding for students with low-incidence disabilities.

The Budget also includes: (1) \$15 million federal Individuals with Disabilities Education Act (IDEA) funds for the Golden State Teacher Scholarship Program to increase the special education teacher pipeline, (2) \$8.6 million federal IDEA funds to assist local educational agencies with developing regional alternative dispute resolution services and statewide mediation services, and (3) \$1.1 million federal IDEA funds for a study of the current special education governance and accountability structure, as well as three workgroups to create a statewide Individualized Education Program template, provide recommendations on alternative pathways to a diploma for students with disabilities, and study the costs of out-of-home care.

AVERAGE DAILY ATTENDANCE

Since the beginning of the COVID-19 pandemic in early March, local educational agencies across the state closed for classroom instruction, transitioning students and teachers to distance learning models. The loss of classroom-based instruction has had unprecedented impacts on students and families, especially the most vulnerable students.

To help minimize additional learning loss related to COVID-19, the budget presumes that local educational agencies should transition back to providing in-classroom instruction in the 2020-21 school year. However, if local or state public health official orders necessitate a school closure, local educational agencies will need flexibility to

K-12 EDUCATION

provide distance learning. To ensure funding stability regardless of the instructional model, the Budget includes a hold harmless for the average daily attendance used to calculate school funding for all local educational agencies. Additionally, the Budget includes requirements for distance learning to ensure that, when in-person instruction is not possible, students continue to receive access to a quality education via distance learning.

Specifically, the Budget includes:

- A hold-harmless for the purpose of calculating apportionment in the 2020-21 fiscal year; average daily attendance shall be based on the 2019-20 year, except for new charter schools commencing instruction in 2020-21.
- An exemption for local educational agencies from the annual minimum instructional minutes requirement. The minimum daily instructional minutes and minimum instructional day requirements are maintained, but may be met through a combination of in-person and distance learning instruction.
- Requirements for distance learning services, including the provision of devices and connectivity and supports for students with exceptional needs, English language learner students, youth in foster care, and youth experiencing homelessness, as well as students in need of mental health supports. Daily interaction with students in distance learning is required and local educational agencies are required to provide access to nutrition programs.
- Distance learning attendance requirements, including documentation of daily student participation, weekly engagement records, and attendance reporting for purposes of chronic absenteeism tracking. The Budget also requires local educational agencies offering distance learning to develop tiered re-engagement strategies for students who do not participate and to regularly engage with parents or guardians regarding academic progress.
- Fiscal penalties for local educational agencies offering distance learning that do not meet instructional day requirements or the attendance-related requirements.
- A material revision exemption for site-based charter schools offering distance learning.

Additionally, the Budget provides \$750,000 one-time Proposition 98 General Fund for the Sacramento County Office of Education to develop distance learning curriculum and instructional guidance for mathematics, English language arts, and English language development, for adoption by the State Board of Education by May 31, 2021.

2020-21 LEARNING CONTINUITY AND ATTENDANCE PLAN

In April, the Governor issued Executive Order N-56-20, which allowed local educational agencies to submit local control and accountability plans, normally due July 1, 2020, by December 15, 2020, in recognition of the challenges that local educational agencies would have faced in completing the plans during the COVID-19 pandemic this spring. Federal funds provided to schools for COVID-19 must be expended by local educational agencies on an accelerated timeline. In order to ensure transparency around the expenditures of these new federal funds, and in alignment with new flexibilities related to distance learning, the Budget replaces the December local control and accountability plan with a Learning Continuity and Attendance Plan, to be completed by September 30, 2020.

The Budget requires the Superintendent of Public Instruction, in consultation with the executive director of the State Board of Education, to develop the template for the Learning Continuity and Attendance Plan by August 1, 2020, and requires the template to include all of the following:

- A description of how the local educational agency will provide continuity of learning during the COVID-19 pandemic and address all of the following:
 - Distance learning
 - Learning loss
 - Mental health and social-emotional well-being
 - Professional development
 - Pupil engagement and outreach
 - School nutrition
- Local educational agency expenditures related to addressing the impacts of the COVID-19 pandemic.
- How local educational agencies are increasing or improving services in proportion to funds generated on the basis of the number and concentration of English learners, youth in foster care, and low-income students pursuant to the local control funding formula.

In adopting the Learning Continuity and Attendance Plan, local educational agencies must consult with stakeholders, solicit stakeholder input, and hold public hearings on the plan.

SCHOOL POLICING

Schools serve a foundational role in the social development of students. This development can be advanced or hindered by the presence of police officers on school campuses. To better promote student mental health, restorative justice, and social-emotional well-being, state and local leaders must evaluate opportunities for improvement in school safety infrastructure.

To this end, the Budget includes \$200,000 one-time non-Proposition 98 General Fund for the creation of a Young People's Task Force, whose members can speak to the lived reality of school policing and will inform changes in policy, contingent on the enactment of future legislation. The Budget also includes intent language for the Legislature to evaluate the presence of law enforcement on school campuses and consider reforms informed by local needs to improve student safety.

EMPLOYEE PROTECTIONS

To ensure the continuity of employment for essential school staff during the COVID-19 pandemic, the Budget includes the following:

- Suspension of the August 15, 2020, layoff window for teachers and other non-administrative certificated staff.
- Suspension of layoffs for classified staff working in transportation, nutrition, and custodial services from July 1, 2020 through June 30, 2021.

The Budget also includes the intent of the Legislature that school districts, community college districts, joint powers authorities, and county offices of education retain all classified employees in the 2020-21 fiscal year.

Other Significant Adjustments

- **Classified School Employees Summer Assistance Program**—An increase of \$60 million Proposition 98 General Fund to provide a match of state funds for participating classified employees to be paid during the summer recess period.

- **Department of Education State Operations**—A total increase of \$436,000 non-Proposition 98 General Fund for the following:
 - \$336,000 ongoing non-Proposition 98 General Fund for the School Fiscal Services Division for workload associated with deferrals and average daily attendance changes.
 - \$100,000 one-time non-Proposition 98 General Fund for the Department of Education to develop a template for the Learning Continuity and Attendance Plan in consultation with the executive director of the State Board of Education.

EARLY LEARNING AND CARE PROGRAMS

Investing in early learning and care supports the success of children and families of color, the majority of people served by these programs. The Budget preserves funding for early learning and care programs to the greatest extent possible, given the constraints of the COVID-19 Recession. Access, reimbursement rate levels, and quality investments are all maintained or grown, with a specific focus on serving the children of income-eligible workers essential to the fight against COVID-19.

PROTECTING ESSENTIAL SERVICES

To support access for families and provide stable funding for early learning and care programs and providers, the Budget:

- Maintains early learning and care provider reimbursement rates at 2019-20 levels.
- Eliminates the application of negative statutory growth adjustments for early learning and care programs.
- Provides a hold harmless provision in 2020-21 for providers that contract directly with the Department of Education.
- In 2020-21, provides reimbursement at a child's maximum certified level of need for all providers accepting vouchers.

CARES ACT FUNDING FOR CHILD CARE

California received \$350.3 million through the federal CARES Act for COVID-19 related child care activities. To maximize the benefits of these funds to providers and families, the Budget includes the following expenditure plan:

- \$144.3 million for state costs associated with SB 89 expenditures, family fee waivers, and provider payment protection.
- \$125 million for voucher provider hold harmless and stipends.
 - Up to \$62.5 million to fund providers accepting vouchers at the maximum certified level of need.
 - At least \$62.5 million for one-time stipends for providers accepting vouchers that offer care during the COVID-19 pandemic.
- \$73 million to continue care for at-risk children and essential workers.
- \$8 million to extend family fee waivers until June 30, 2020.

FUTURE FEDERAL COVID-19 FUNDS FOR CHILD CARE

To allow for the quick deployment of potential future federal COVID-19 funds for child care, the Budget includes language allowing up to \$300 million of such funds to be allocated by the following schedule:

- \$150 million to extend access for families being served through limited-term subsidies and expand access for unserved, eligible families.
- \$125 million to provide limited-term stipends for state-subsidized child care providers offering care during the COVID-19 pandemic.
- \$25 million to assist licensed child care providers with costs to re-open child care facilities closed due to the COVID-19 pandemic, and to supplement unfunded costs caused by low attendance or temporary closures due to the COVID-19 pandemic.

SHIFT OF CHILD CARE PROGRAMS TO THE DEPARTMENT OF SOCIAL SERVICES

To promote a high-quality, affordable, and unified early childhood system, the Budget includes \$2.3 million General Fund in 2020-21 to transition the existing child care and child development programs from the Department of Education to the Department of

Social Services. This will align all child care programs within a single department in state government and will ease the administration of collective bargaining commencing later this year.

Other Significant Adjustments

- \$9.3 million one-time federal funds to develop and implement an early learning and care data system.
- A decrease in new federal Child Care and Development Block Grant funding available for child care vouchers of \$6 million, bringing the total allocation for increased access in the Alternative Payment Program from \$53.3 million to \$47.2 million. Additionally, the Budget specifies that first priority for these funds will be to extend subsidized care for income-eligible essential worker families and at-risk children from a limited-term to an ongoing basis.

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HIGHER EDUCATION

The Budget makes adjustments that reduce the overall level of support for the state's public higher education segments—the University of California (UC), the California State University (CSU), and the California Community Colleges (CCC). However, the Budget will increase state support for those systems if sufficient federal funds are received.

The Budget includes total funding of \$19.4 billion General Fund and local property tax for all higher education entities in 2020-21.

UNIVERSITY OF CALIFORNIA

In addition to supporting undergraduate instruction, the UC is the state's primary institution for awarding doctoral degrees and professional degrees. The UC's ten campuses provide education to approximately 280,000 undergraduate and graduate students, and UC's university extension programs reach an additional 400,000 students. In 2018-19, the UC awarded 77,000 degrees.

The Budget reflects a net General Fund decrease of \$258.4 million, which is the result of investments totaling \$44 million, a base increase of approximately \$169.2 million, and contingent reductions totaling \$471.6 million. As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for

purposes identified below, funds will be appropriated for the 2020-21 fiscal year, pursuant to Control Section 8.28.

The federal CARES Act provided UC with approximately \$260 million. The Act requires 50 percent be allocated to emergency financial aid. The remaining funds should be used to help the UC maintain their programs in the 2020-21 fiscal year.

The Budget is based on the expectation that UC will uphold the Administration's equity principles, minimize the potential impact of these reductions on disadvantaged students, and implement the budget adjustments associated with these reductions in ways that do not disproportionately impact disadvantaged students. The UC is also expected use their unrestricted reserves to mitigate the impact of these reductions from one fiscal year to the next.

Other Significant Adjustments

- **General Fund Adjustments**—An increase of \$213.2 million General Fund, of which \$678,000 is one-time, consisting of:
 - \$169.2 million for a base adjustment to mitigate the impact of contingent General Fund reductions.
 - \$25 million for UC Riverside School of Medicine operational costs.
 - \$15 million for the UC Merced-UCSF Fresno Partnership for a Branch Medical School Campus.
 - \$3.7 million (\$3.1 million of which is ongoing) to offset declining Proposition 56 revenue supporting a statewide grant program to increase the number of available graduate medical residency slots.
 - \$345,000 for a baseline immigrant legal services adjustment.
- **Contingent General Fund Reductions**—As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year as follows:
 - \$428.4 million for UC operational costs.
 - \$43.2 million for UC Office of the President (UCOP), UC PATH, and the UC Division of Agriculture and Natural Resources.

- **Animal Shelter Grants**—If sufficient philanthropic support does not materialize by April 1, 2021, the Budget authorizes the Director of Finance to provide up to \$5 million one-time General Fund to support a one-time animal shelter demonstration grant program through the UC Davis Koret Shelter Medicine Program.
- **UC Subject Matter Project**—The Budget provides \$6 million in one-time federal funds to support the mitigation of learning loss in mathematics, science, and English and language arts through existing UC Subject Matter Projects.
- **UC PATH**—The Budget increases UCOP's authority to assess campuses in support of UC PATH from \$15.3 million to \$46.8 million, while also requiring UCOP to collaborate with campuses to maximize their use of non-core funds to support the assessment.
- **Deferred Maintenance**—The Budget authorizes UC to redirect up to \$21.6 million in deferred maintenance funding from the 2019 Budget Act to support for undergraduate instruction, undergraduate resident enrollment, student support services, and other core academic operations.

CALIFORNIA STATE UNIVERSITY

The CSU is the state's broadest platform for providing four-year education, with a focus on undergraduate and master's-level graduate instruction. The CSU educates approximately 475,000 students on 23 campuses, including many based in underserved regions, while also providing additional opportunities through professional and continuing education programs. In 2018-19 the CSU awarded 127,400 degrees.

The Budget reflects a net General Fund decrease of approximately \$299.1 million, which is the result of a base increase of approximately \$199 million, and contingent reductions totaling approximately \$498.1 million. As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year, pursuant to Control Section 8.28.

The federal CARES Act provided CSU with approximately \$525 million. The Act requires 50 percent be allocated to emergency financial aid. The remaining funds should be used to help CSU maintain programs in the 2020-21 fiscal year.

The Budget is based on the expectation that CSU will uphold the Administration's equity principles, will minimize the potential impact of these reductions on disadvantaged students, and implement the budget adjustments associated with these reductions in ways that do not disproportionately impact disadvantaged students. The CSU is also expected use their unrestricted reserves to mitigate the impact of these reductions from one fiscal year to the next.

Other Significant Adjustments

- **Ongoing General Fund Adjustment**—An increase of approximately \$199 million for a base adjustment to mitigate the impact of contingent General Fund reductions.
- **Contingent General Fund Reductions**—As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year as follows:
 - Approximately \$498.1 million for CSU operational costs.
- **Deferred Maintenance**—The Budget authorizes CSU to redirect up to \$146 million in deferred maintenance funding from the 2019 Budget Act to support for undergraduate instruction, undergraduate resident enrollment, student support services, and other core academic operations.

CALIFORNIA COMMUNITY COLLEGES

The CCCs serve as the foundation of the state's higher education system by providing Californians with open access to early-stage undergraduate instruction, basic skills, career education, and transfer opportunities. The CCCs support 2.1 million students across 73 districts, 115 colleges, and 78 educational centers. In 2018-19, the community colleges awarded more than 101,000 certificates and 187,000 degrees.

COMMUNITY COLLEGE FLEXIBILITIES

To assist CCCs in their recovery from the impacts of the COVID-19 Recession and provide additional near-term certainty, the Budget enacts statutory changes to:

- Exempt direct COVID-19-related expenses incurred by districts from the 50 Percent Law. This excludes revenue declines.
- Provide a hardship exemption for districts unable to meet their financial obligations due to the deferrals enacted in the Budget.
- Extend the Student-Centered Funding Formula hold harmless provisions for an additional two years, and authorize the use of past-year data sources that have not been impacted by the COVID-19 pandemic for the calculation of the Student-Centered Funding Formula for 2020-21.
- Encourage and expedite the development of short-term career technical education courses to address the impacts of the COVID-19 pandemic.

Other Significant Adjustments

- **Staff for Working Group on Community College Athlete Compensation**—An increase of \$700,000 one-time non-Proposition 98 General Fund for the CCC Chancellor's Office to contract with an external organization to staff a working group on a community college athlete's use of the athlete's name, image, and likeness for compensation, pursuant to Chapter 383, Statutes of 2019 (SB 206).
- **2019-20 Deferrals**—A deferral of approximately \$330.1 million Proposition 98 General Fund of community college apportionments from 2019-20 to 2020-21.
- **2020-21 Deferrals**—A deferral of approximately \$662.1 million Proposition 98 General Fund of community college apportionments from 2020-21 to 2021-22.

- **2020-21 Deferrals Subject to Control Section 8.28**—As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year as follows:
 - A deferral of approximately \$791.1 million Proposition 98 General Fund of community college apportionments from 2020-21 to 2021-22.
- **COVID-19 Response Block Grant for CCCs**—A one-time increase of approximately \$120.2 million, which is comprised of approximately \$54 million from the Coronavirus Relief Fund (CARES Act) and approximately \$66.3 million Proposition 98 General Fund, for a COVID-19 Response Block Grant for the community colleges to support student learning and mitigate learning loss related to the COVID-19 pandemic.
- **Dreamer Resource Liaisons**—An increase of \$5.8 million Proposition 98 General Fund to fund Dreamer Resource Liaisons and student support services, for immigrant students including undocumented students in community colleges, pursuant to Chapter 788, Statutes of 2019 (AB 1645). These services provide an opportunity to address disparities and advance economic justice by supporting educational attainment, career pathways and economic mobility for students who may face barriers related to their immigration status.
- **Legal Services**—An increase of \$10 million ongoing Proposition 98 General Fund to provide legal services to immigrant students, faculty, and staff on community college campuses.
- **Calbright College**—A decrease of \$5 million ongoing Proposition 98 General Fund for Calbright College, and a decrease of \$40 million one-time Proposition 98 General Fund provided to Calbright College that is redirected to offset apportionments costs for 2020-21.
- **Revised CalPERS/CalSTRS Contributions**—As referenced in the K-12 Education Chapter, to provide local educational agencies and community college districts with increased fiscal relief, the Budget redirects \$2.3 billion appropriated in the 2019 Budget Act to CalSTRS and CalPERS for long-term unfunded liabilities to further reduce employer contribution rates in 2020-21 and 2021-22.

- **CCC Facilities**—An increase of general obligation bond funding of \$223.1 million, including \$28.4 million to start 25 new capital outlay projects and \$194.7 million for the construction phase of 15 projects anticipated to complete design by spring 2021. This allocation represents the next installment of the \$2 billion available to CCCs under Proposition 51.
- **Local Property Tax Adjustment**—A decrease of \$60.9 million Proposition 98 General Fund as a result of increased offsetting local property tax revenues.
- **Food Pantries**—The Budget enacts statutory changes to support food pantries within available Student Equity and Achievement Program funding.
- **CCC State Operations**—An ongoing increase of \$116,000 non-Proposition 98 General Fund for a new position to support the Chancellor's Office accounting operations.

CALIFORNIA STUDENT AID COMMISSION

The California Student Aid Commission, which administers the state's financial aid programs, the largest of which is the Cal Grant, supports over 410,000 financial aid awards to students accessing higher education. The Budget reflects a sustained commitment to financial aid programs as a cornerstone of our dedication to providing the least resourced students access to higher education.

Other Significant Adjustments

- **Cal Grant Program Adjustment**—A decrease of approximately \$149 million in 2019-20 and approximately \$63.3 million in 2020-21 to reflect revised estimates of the number of new and renewal Cal Grant awardees in 2019-20 and 2020-21.
- **Temporary Assistance for Needy Families (TANF) Adjustment**—A decrease of \$600 million in federal TANF reimbursements in 2019-20 which increases General Fund support for the Cal Grant program by an equal amount.
- **Golden State Teacher Grant Program**—As referenced in the K-12 Education Chapter, an increase of \$15 million one-time federal funds to support grants to students enrolled in special education teacher preparation program at a high-need school site.

- **Grant Delivery System**—An increase of \$5.3 million one-time General Fund to fund the third year and final year of project development costs for the Grant Delivery System Modernization Project.
- **Student Loan Debt Service Work Group**—An increase of \$250,000 one-time General Fund to convene a work group to analyze student loan borrowing patterns and develop more affordable loan repayment alternatives.
- **Cal Grant B Service Incentive Grant**—A reappropriation of \$7.5 million one-time General Fund from the 2019 Budget Act and a redirection of the Program's \$7.5 million funding in 2020-21 to support the Disaster Relief Emergency Student Financial Aid Program, which will provide emergency financial aid to students at the University of California, California State University, and California Community Colleges.
- **Child Savings Account Grant Program**—A decrease of \$15 million one-time General Fund to the Child Savings Account program, established in the 2019 Budget Act.
- **Contingent General Fund Reduction**—As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year as follows:
 - A decrease of \$88.4 million one-time General Fund for the Golden State Teacher Grant program, established in the 2019 Budget Act.

UC HASTINGS COLLEGE OF THE LAW

Affiliated with the UC system, but governed by its own board, the Hastings College of the Law is one of the state's important legal institutions. Hastings primarily serves students seeking a Juris Doctor degree, but also offers programs leading to Master of Laws and Master of Studies in Law degrees. In 2018-19, UC Hastings enrolled 964 full-time equivalent students.

Other Significant Adjustments

- **Base Adjustment**—An ongoing increase of approximately \$1.4 million General Fund to mitigate the impact of contingent General Fund reductions.

- **Contingent General Fund Reduction**—As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year as follows:
 - Approximately \$1.9 million General Fund for operating costs.

CALIFORNIA STATE LIBRARY

The California State Library offers a wide range of services, including timely information for the Governor and Legislature, archival access for researchers, and technical assistance for libraries across California. The State Library also administers state- and federally-funded programs to support local libraries.

Other Significant Adjustments

- **Braille Institute of America in Los Angeles**—An increase of \$500,000 ongoing General Fund to support services provided by the Braille Institute of America in Los Angeles.
- **Statewide Library Broadband Services Augmentation**—An increase of \$170,000 ongoing General Fund for continued participation in the Corporation for Education Network Initiatives in California.
- **Library Services Act**—A decrease of \$1.75 million ongoing General Fund.

FRESNO DRIVE

The Budget includes \$2 million one-time General Fund to support the Fresno Developing the Region's Inclusive and Vibrant Economy (DRIVE) initiative's Fresno-Merced Food Innovation Corridor concept. This funding will support planning, community engagement, and financial planning needed to secure the private and philanthropic resources to launch and scale the Fresno-Merced Future of Food (F3) Innovation Initiative over the next ten years.

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HEALTH AND HUMAN SERVICES

The Health and Human Services Agency oversees departments and other state entities that provide health and social services to California's vulnerable and at-risk residents.

The Budget includes \$179.6 billion (\$44.8 billion General Fund and \$134.8 billion other funds) for all health and human services programs.

The Budget utilizes \$450 million of the Safety Net Reserve in 2020-21 to prevent reductions that otherwise would occur in California Work Opportunity and Responsibility to Kids (CalWORKs) and Medi-Cal services and benefits.

DEPARTMENT OF HEALTH CARE SERVICES

Medi-Cal, California's Medicaid program, is administered by the Department of Health Care Services. Medi-Cal is a public health care program that provides comprehensive health care services at no or low cost for low-income individuals. The federal government mandates basic services be included in the program, including: physician services; family nurse practitioner services; hospital inpatient and outpatient services; laboratory and radiology services; family planning; and early and periodic screening, diagnosis, and treatment services for children. In addition to these mandatory services the state provides optional benefits, such as outpatient drugs, dental, home and community-based services, and medical equipment. The Department also operates the California Children's Services and the Primary and Rural Health programs, and

oversees county-operated community mental health and substance use disorder programs.

The Medi-Cal budget is \$99.5 billion (\$22.7 billion General Fund) in 2019-20 and \$115.4 billion (\$23.6 billion General Fund) in 2020-21. The 16-percent increase in total fund cost in 2020-21 compared with 2019-20 is generally attributable to the COVID-19 pandemic, including a projected increase in caseload. This increase is associated with higher projected unemployment as well as the temporary suspension of program disenrollment as a condition of receiving the temporary increase in the Federal Medical Assistance Percentage (FMAP). The Budget assumes caseload will peak at 14.5 million in July 2020, or about 2 million above what caseload would have been absent the COVID-19 pandemic. The Budget includes \$898.6 million (\$319.0 million General Fund) in 2019-20 and \$6.9 billion (\$2.4 billion General Fund) in 2020-21 for increased caseload.

Other Significant Adjustments

- **Enhanced Federal Funding**—A decrease of \$5.1 billion General Fund—and corresponding increase in federal funds—associated with the assumed receipt of an enhanced FMAP through June 30, 2021. This includes impacts reflected in the Department of Social Services and Department of Developmental Services budgets for Medicaid-covered services.
- **Nursing Facility Financing**—\$185.6 million (\$92.8 million General Fund) in 2020-21 to extend through December 1, 2022 the financing system for skilled nursing facilities (SNFs), originally established pursuant to Chapter 875, Statutes of 2004 (AB 1629). In addition, the Budget includes a 10-percent rate increase for SNFs assumed to be in effect for four months during the COVID-19 pandemic, at a General Fund cost of \$72.4 million in 2019-20 and \$41.6 million in 2020-21.
- **340B Supplemental Payment Pool**—\$52.5 million (\$26.3 million General Fund) in 2020-21 to provide supplemental payments to specified non-hospital clinics who participated in the federal 340B pharmacy program. These payments grow to \$105 million (\$52.5 million General Fund) in 2021-22 and annually thereafter.
- **Managed Care Efficiencies**—The Budget implements changes to the way that managed care capitation rates are determined. These changes include various acuity, efficiency, and cost containment adjustments. These adjustments would be effective for the managed care rate year starting January 1, 2021, and would yield savings of \$193.6 million (\$63 million General Fund) in 2020-21. The Budget includes a 1.5 percent rate reduction for the July 1, 2019, through December 31, 2020 period, resulting in savings of \$586 million (\$182 million General Fund) in 2020-21. The Budget

also includes a risk corridor for the period of July 1, 2019 to December 31, 2020. The Budget does not implement a maximum fee schedule for inpatient services in the managed care program.

- **Hearing Aids**—\$352,000 General Fund in 2020-21 to administer and establish a program to assist with the cost of hearing aids and related services for children without health insurance coverage in households with incomes up to 600 percent of the federal poverty level, no sooner than July 1, 2021. The Budget assumes ongoing costs of approximately \$15 million General Fund to provide and administer this benefit.
- **Proposition 56 Medi-Cal Investments**—\$1.1 billion Proposition 56 funding for supplemental payments, rate increases, and value-based payments. The Budget also maintains funding for the Physicians' and Dentists' Loan Repayment Program allocated in the 2018 and 2019 Budget Acts. All Proposition 56 programs other than women's health, family planning, and the Loan Repayment Program are subject to suspension on July 1, 2021. The suspension will be lifted if the Administration determines through the 2021 Budget Act process that there is sufficient General Fund revenue to support all suspended programs in the subsequent two fiscal years.
- **Optional Benefits**—The Budget maintains funding for the Community Based Adult Services (CBAS) and Multipurpose Senior Services Program (MSSP). Additionally, the Budget continues ongoing funding for full adult dental services, acupuncture, optometry, nurse anesthetists services, occupational and physical therapy, pharmacist services, and the Diabetes Prevention program.
- **Suspended Programs**—The Budget maintains the suspension framework in the 2019 Budget Act for audiology and speech therapy, incontinence creams and washes, optician and optical lab services, podiatry, screening, brief intervention and referral to treatments for opioids and other illicit drugs in Medi-Cal. The funding will be suspended on December 31, 2021. The suspension will be lifted if the Administration determines through the 2021 Budget process that there is sufficient General Fund revenue to support all suspended programs in the subsequent two fiscal years.
- **Medi-Cal Aged, Blind, and Disabled**—\$135.5 million (\$67.7 million General Fund) to expand Medi-Cal to aged, blind, and disabled individuals with incomes between 123 percent and 138 percent of the federal poverty level and the Medi-Cal Aged, Blind, and Disabled Medicare Part B disregard.
- **Postpartum Mental Health Expansion**—\$34.3 million General Fund to implement the 2019 Budget Act expansion of Medi-Cal to post-partum individuals who are receiving health care coverage and who are diagnosed with a maternal mental

health condition. The increased funding for postpartum care will be suspended on December 31, 2021. The suspension will be lifted if the Administration determines through the 2021 Budget Act process that there is sufficient General Fund revenue to support all suspended programs in the subsequent two fiscal years.

- **County Administration**—An increase of \$67.7 million (\$23.7 General Fund) in 2020-21 relative to the 2019 Budget Act for county eligibility determination activities based on growth in the California Consumer Price Index. The Budget also reflects an increase of \$12.7 General Fund in 2019-20 and matching federal funds approved through the Control Section 36.00 process.
- **Behavioral Health Counselors in Emergency Departments**—The Budget maintains one-time \$20 million General Fund to hire behavioral health providers and peer navigators in emergency departments to screen patients and offer intervention and referral to mental health or substance use disorder programs.
- **Medical Interpreters Pilot Project**—The Budget maintains one-time \$5 million General Fund for the Medi-Cal Interpreters Pilot Project.
- **Medi-Cal Enrollment Navigators**—The Budget maintains one-time \$15 million General Fund for the Medi-Cal Health Enrollment Navigators program.
- **Caregiver Resource Centers**—The Budget maintains \$10 million General Fund in both 2020-21 and 2021-22 for caregiver resource center information technology improvements.
- **Martin Luther King, Jr. Hospital**—The Budget maintains \$8.2 million General Fund for a supplemental payment to this hospital.
- **Dental Managed Care**—The Budget maintains dental managed care in Los Angeles and Sacramento Counties for calendar year 2021.

DEPARTMENT OF SOCIAL SERVICES

The Department of Social Services (DSS) serves, aids, and protects needy and vulnerable children and adults in ways that strengthen and preserve families, encourage personal responsibility, and foster independence. The Department's major programs include CalWORKS, CalFresh, In-Home Supportive Services (IHSS), Supplemental Security Income/State Supplementary Payment, Child Welfare Services, Community Care Licensing, and Disability Determination. The Budget includes \$37.1 billion (\$11.6 billion General Fund) in 2020-21 for the Department.

Other Significant Adjustments

- **CalWORKs Time Clocks**—Statutory changes to establish a single 60-month CalWORKs time limit and allow clients to participate in a greater array of welfare-to-work activities for the entire 60 months, effective May 1, 2022 or when automation is possible. The Budget includes \$2.6 million General Fund/Temporary Assistance for Needy Families (TANF) block grant funding in 2020-21, growing to \$66.2 million General Fund in 2023-24.
- **CalWORKs Single Allocation**—\$2.4 billion General Fund/TANF for counties' CalWORKs Single Allocation which funds employment services, county administration, Stage One child care, and Cal-Learn.
- **CalWORKs Expanded Subsidized Employment**—The Budget maintains \$134.1 million General Fund/TANF for CalWORKs Expanded Subsidized Employment.
- **CalWORKs Outcomes and Accountability Review (Cal-OAR)**—Statutory changes making components of Cal-OAR optional for counties in 2020-21, resulting in a one-time reduction of \$21 million General Fund/TANF.
- **CalWORKs Home Visiting Program**—The Budget includes a one-time reduction of \$30 million General Fund/TANF and continues to serve clients already enrolled in the CalWORKs Home Visiting program.
- **CalFresh Simplifications**—The Budget includes statutory changes that: (1) require state CalFresh verification rules be no more restrictive than federal rules, (2) clarify counties must use the most up-to-date information to determine eligibility, (3) require counties to contact clients electronically and telephonically to collect information for reporting changes, (4) require counties to implement flexible interview scheduling techniques, (5) require DSS create a workgroup to consider reporting structure and submit recommendations to the Legislature, (6) require counties to maximize integrated application for Medi-Cal and CalFresh, including the development and automation of a pre-populated CalFresh application for Medi-Cal recipients, and (7) require the development and automation of a pre-populated semi-annual reporting form. The Budget includes \$27.5 million General Fund in 2020-21 and \$8.4 million annually thereafter for these purposes.
- **IHSS Hours Restoration**—The Budget includes \$410 million General Fund in 2020-21 to avoid 7-percent across-the-board reduction to IHSS service hours. The increased funding for IHSS service hours will be suspended on December 31, 2021. The suspension will not occur if the Administration determines through the 2021

Budget process that there is sufficient General Fund revenue to support all suspended programs.

- **Conform IHSS Residual Program to Timing of Medi-Cal Coverage**—Savings of \$72.6 million General Fund ongoing by conforming use of the IHSS Residual Program to the timing of Medi-Cal coverage.
- **IHSS County Administration**—The Budget includes ongoing savings of \$12.2 million ongoing to freeze IHSS county administration funding at the 2019-20 level.
- **Extended Foster Care**—\$32 million one-time General Fund in 2020-21 to temporarily extend foster care support for youth who turn 21 while in the extended foster care program, thus allowing them to continue to remain in the program and receive assistance.
- **Emergency Assistance for Pending Resource Families**—\$13.4 million one-time General Fund in 2020-21 to provide caregivers with up to four months of emergency assistance payments pending resource family approval and up to twelve months for cases that meet good cause criteria. Beginning in 2021-22 and annually thereafter, the state will fund up to three months of emergency assistance payments for caregivers pending approval, as local child welfare agencies and probation departments are anticipated to complete the resource family approval process on a timelier basis.
- **Transitional Housing Supplement for Older Foster Youth**—\$4 million ongoing General Fund ongoing to provide transitional housing supplement for foster youth over 18 years of age.
- **Continuum of Care Reform Reconciliation for Fiscal Years 2016-17 and 2017-18**—\$2.6 million one-time General Fund in 2020-21 to reflect Continuum of Care Reform true-up related to county Child and Family Teams actual expenditures for fiscal years 2016-17 and 2017-18 and \$80 million one-time General Fund in 2020-21 to support county child welfare departments.
- **California Newcomer Education and Well-Being Project**—\$15 million one-time Proposition 98 General Fund for the California Newcomer Education and Well-Being Project to assist school districts in supporting refugee and unaccompanied undocumented minor students' well-being and academic performance. The funding, which is available over three years, also will provide school-based supports to immigrant families for access to safety net and wellness programs including through guidance about federal immigration policies like the public charge, that contribute to a chilling effect on government assistance and deeper inequities.

- **Food Banks**—A one-time increase of \$50 million General Fund for existing Emergency Food Assistance Program providers, food banks, tribes, and tribal organizations to mitigate increases in food needs among low-income and food-insecure populations.
- **Transition of Child Care Programs**—\$2.3 million General Fund in 2020-21 to transition existing early learning and child care programs from the Department of Education to the Department of Social Services, effective July 1, 2021. This transition will promote a high-quality, affordable, and unified early childhood system; and maximize the integration of early learning and care programs with other social safety net programs that support children and families.

DEPARTMENT OF AGING

The California Department of Aging administers programs that serve older adults, adults with disabilities, family caregivers, and residents in long-term care facilities throughout the state to increase choices, equity, and well-being for all Californians as we age. The Budget includes \$406.5 million (\$84.3 million General Fund) in 2019-20 and \$258.9 million (\$68.0 million General Fund) in 2020-21 for the Department.

Other Significant investments

- **Community-Based Adult Services**—The Budget maintains the CBAS program and includes \$3.2 million General Fund in 2020-21 and \$2.7 million ongoing. These figures reflect impacts to CBAS state operations; CBAS local assistance is in the DHCS budget.
- **Multipurpose Senior Services Program**—The Budget maintains MSSP and includes \$22.2 million General Fund in 2020-21 and \$21.8 million ongoing

DEPARTMENT OF DEVELOPMENTAL SERVICES

The Department of Developmental Services (DDS) provides individuals with developmental disabilities a variety of services that allow them to live and work independently or in supported environments. California provides services to individuals with developmental disabilities as an entitlement. The Budget includes \$8.5 billion (\$5 billion General Fund) in 2019-20 and \$9.8 billion (\$5.9 billion General Fund) in 2020-21 for the Department.

Other Significant Adjustments

- **Supplemental Rate Increases for Additional Service Codes**—\$18 million (\$10.8 million General Fund) in 2020-21 and 2021-22 to provide supplemental rate increases for Early Start Specialized Therapeutic Services, Infant Development and Independent Living Services. This approach is consistent with the supplemental rate increases included in the 2019 Budget Act. The increased funding for the three services will be suspended on December 31, 2021. The suspension will be lifted if the Administration determines through the 2021 Budget process that there is sufficient General Fund revenue to support all suspended programs.
- **Uniform Holiday Schedule**—\$31.3 million General Fund in 2020-21 to suspend implementation of the Uniform Holiday Schedule. The funding will be suspended on December 31, 2021. The suspension will be lifted if the Administration determines through the 2021 Budget process that there is sufficient General Fund revenue to support all suspended programs.
- **COVID-19 Impacts**—\$336.7 million (\$237.5 million General Fund) in 2020-21 to reflect impacts of the COVID-19 pandemic on the developmental services system. These changes reflect increased costs associated with increased utilization in purchase of services specific to residential settings, respite, and personal attendants. These costs also reflect surge development at the developmental centers and in the community.
- **Incompetent to Stand Trial (IST) Capacity**—\$16.4 million General Fund in 2020-21 to activate a 20-bed unit at Porterville Developmental Center (PDC) and develop five enhanced behavioral support homes to increase capacity for IST placements and secure community resources for individuals at PDC. The increased capacity at PDC will sunset on June 30, 2023.
- **Fairview Developmental Center Warm-Shutdown**—\$11.9 million General Fund to extend the warm-shutdown period at Fairview Developmental Center through 2020-21 until a site assessment is completed to inform the disposition of the property.

DEPARTMENT OF PUBLIC HEALTH

The Department of Public Health is charged with protecting and promoting the health and well-being of the people of California. The Budget includes \$3.2 billion (\$214.1 million General Fund) in 2020-21 for the Department.

The Department of Public Health is at the forefront of the state's response to the COVID-19 pandemic—extensively planning, preparing, and responding to the pandemic since mid-January. The Department's efforts have included issuing a stay-at-home order to save lives, increasing testing capacity, increasing hospital surge capacity, issuing statewide public health guidance, and providing guidance to local governments as the state works to reopen.

Other Significant Adjustments

- **COVID-19 Testing and Resources**—\$5.9 million General Fund (\$4.8 million ongoing) to support laboratory staff to increase the state laboratories' testing capacity, and to purchase equipment and laboratory supplies used specifically for COVID-19 testing. Additionally, resources will support emergency coordination, communication, and response, and provide ongoing support for public health laboratory capacity and disease surveillance.
- **Licensing and Certification**—\$3.1 million State Licensing and Certification Program Fund and 75 positions to increase staff capacity to support health facility evaluations, provider technical support services, and healthcare-associated infection monitoring workload needs. The Department's budget and position authority will increase over the following two fiscal years in order to perform 100 percent of estimated workload in 2020, depending on the future fiscal outlook of the state.
- **Ongoing Infectious Disease Prevention**—\$5 million ongoing General Fund each for STD, human immunodeficiency virus (HIV), and hepatitis C virus prevention and control that otherwise would have been suspended on January 1, 2022.
- **Cannabis Surveillance and Education**—\$20.8 million (\$20.3 million Cannabis Control Fund and \$527,000 in reimbursements) in 2020-21 and \$20.6 million (\$20 million Cannabis Control Fund and \$527,000 in reimbursements) in 2021-22 and ongoing to support 87 existing permanent positions and mandated activities of the Medicinal and Adult-Use Cannabis Regulation and Safety Act and to continue the Medical Marijuana Identification Card Program.
- **Other Public Health Programs**—The Budget maintains funding for the Black Infant Health Program, the Safe Cosmetics Program, mental health disparities reduction grants, a farmworker health study, and sickle cell anemia monitoring activities.

DEPARTMENT OF STATE HOSPITALS

The Department of State Hospitals administers the state mental health hospital system, the Forensic Conditional Release Program, the Sex Offender Commitment Program, and the evaluation and treatment of judicially and civilly committed patients. The Budget includes \$2.1 billion (\$1.9 billion General Fund) in 2020-21 for the Department.

Other Significant Adjustments

- **Mission-Based Review**—\$5 million General Fund and 12.5 positions in 2020-21 and \$10 million General Fund and 30 positions in 2021-22 and ongoing to support critical needs identified as part of the treatment team and protective services staffing studies.
- **State Hospital System Infrastructure**—\$26.7 million General Fund in 2020-21 for three critical roof repair and replacement projects at three state hospitals. The Budget also includes \$5.3 million General Fund in 2020-21 to mitigate ligature risks at four hospitals. This funding is for the first year of a seven-year project totaling \$73.6 million General Fund.

Other Health and Human Services Adjustments

- **Behavioral Health Focused Investigations**—\$2.8 million in 2020-21 and \$4.7 million in 2020-21 and annually thereafter from the Managed Care Fund to further enforce full service commercial health plan's compliance with laws requiring parity of the behavioral health service delivery system with that of the medical and surgical service delivery system.
- **Child Support Disregard**—The Budget increases the child support disregard and pass-through up to the federal share limit, \$100 for a family with one child and \$200 for a family with two or more children.
- **CBAS and MSSP**—\$3.2 million General Fund in 2020-21 and \$2.7 million ongoing for CBAS and \$22.2 million General Fund in 2020-21 and \$21.8 million ongoing for MSSP. These programs are also discussed in detail under the Department of Health Care Services section. The figures in this section only reflect impacts to the Department of Aging budget.
- **Health Care Workforce Investment**—\$33.3 million ongoing General Fund to support the Song-Brown Healthcare Workforce Training Program at the Office of Statewide

Health Planning and Development. This funding will primarily pay for new and existing residency slots for primary care physicians.

- **Independent Living Centers**—The Budget maintains funding for the Independent Living Centers funded by the Department of Rehabilitation
- **Realignment Backfill for Counties**—\$750 million to provide support for counties experiencing revenue losses for realigned programs, and to the extent the federal government provides sufficient eligible funding by October 15, 2020, an additional \$250 million may be provided. For additional information, see the Homelessness and Local Government chapter.

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HOMELESSNESS AND LOCAL GOVERNMENT

HOMELESSNESS AND LOCAL GOVERNMENT

The Budget continues California's commitment to resolve the state's homelessness crisis. California has experienced significant increases in the number of unsheltered individuals in recent years, a problem inextricably linked to the state's underproduction of affordable housing. The state's approach has been to simultaneously focus on preservation and new affordable housing production while also investing in comprehensive solutions to address homelessness.

The unprecedented COVID-19 pandemic has significantly impacted state finances, but the state's broad goals to reduce homelessness remain unchanged—moving individuals and families experiencing homelessness into stable housing and providing support to help stabilize and prevent homelessness. However, the strategy to achieve these goals has evolved given the state's fiscal constraints and immediate needs.

PROJECT ROOMKEY AND HOMEKEY

At the outset of the COVID-19 pandemic, the state acted quickly to prioritize vulnerable populations by initiating Project Roomkey, a multi-agency state effort to provide safe isolation hotel and motel rooms for vulnerable individuals experiencing homelessness.

Chapter 2, Statutes of 2020 (SB 89), provides emergency expenditure authority of up to \$1 billion for COVID-19 relief. In March, the Administration issued \$150 million for

COVID-19-related emergency assistance, including \$100 million for local governments and Continuums of Care to help protect Californians experiencing homelessness, administered through the Homeless Coordinating and Financing Council within the Business, Consumer Services and Housing Agency (BCSH) using the existing Homeless Housing Assistance Prevention (HHAP) allocation formulas. It also included \$50 million to the Department of Social Services to secure hotel and motel rooms and acquire trailers to safely house the most at-risk homeless populations.

As of late June, Project Roomkey and its county partners had secured over 15,700 hotel and motel units, of which more than 10,600 are occupied, providing safe shelter for an estimated 13,000 individuals in total. In addition, the state purchased and distributed over 1,300 trailers to local governments for the same purposes.

This housing provides short-term emergency shelter for homeless individuals to mitigate the spread of COVID-19 among this vulnerable population and were intended to keep hospitals and emergency rooms available for a surge in treating critically ill COVID-19 patients. The opportunity now is to acquire as many of these hotels and motels as possible, together with other appropriate residential settings, and convert them into permanent and affordable housing opportunities for Californians experiencing homelessness.

Building off the success of the state's short-term emergency solution, Project Roomkey, the Budget includes \$550 million of the state's direct allocation of federal Coronavirus Relief Fund (CRF) for *Homekey*—a statewide effort to acquire hotels, motels, residential care facilities, and other housing that can be converted and rehabilitated to provide permanent housing for persons experiencing homelessness, and who are also at risk of COVID-19. Through the Department of Housing and Community Development (HCD), the state will provide grants to local jurisdictions to acquire these facilities, which will be owned and operated at the local level. This funding must be expended by December 30, 2020, per federal requirements. The Budget also includes an additional \$50 million General Fund for the acquisition of and to provide initial operating subsidies for Homekey sites. These funds will provide a critical supplement to allow cities and counties to support interim needs of these facilities and their residents.

HCD will accept applications from cities and counties that choose to participate in Homekey, and will distribute resources in a way that considers the needs of areas throughout the state, including the number of unsheltered persons, the incidence of COVID-19 infection rates, and the ability of applicants to support projects on an ongoing basis. The state will also provide significant technical assistance to local jurisdictions seeking to purchase and operate former Project Roomkey hotels and

motels to address homelessness in their localities. In addition to CRF funds, the state will use future eligible federal stimulus funds and existing state housing/homeless program funds to further encourage local jurisdictions to invest their dollars toward the same goal—acquiring properties to house people experiencing homelessness.

The Budget also provides exemptions to the California Environmental Quality Act and local zoning restrictions to expedite the acquisition of these units prior to the December 30, 2020 deadline to expend CRF funds.

In light of COVID-19, the Budget also allows certain hotel and motel unit conversions and the preservation of certain mobile homes to count toward local agencies' Regional Housing Needs Allocation and help keep Californians in their homes.

Additionally, to build upon Executive Order N-06-19 on developing innovative affordable housing projects on excess state lands, the Budget allows the Department of General Services to conduct land swaps with local governments. This will allow the state to further bolster affordable housing development, as well as permanent supportive or transitional housing and emergency shelters.

HOMELESS HOUSING, ASSISTANCE, AND PREVENTION PROGRAM

Cities, counties, and Continuums of Care are key to solving the homelessness challenge by coordinating to provide homeless individuals and families with the necessary housing and services. The Budget builds onto the framework of supporting local action on homelessness that began with the \$500 million provided in 2018-19 for the Homeless Emergency Aid Program (HEAP) and the \$650 million provided in 2019-20 for the HHAP.

The Budget provides \$300 million General Fund for additional HHAP grants to be distributed based on the 2019 homelessness point-in-time counts, of which \$130 million is for cities with populations of 300,000 or more, \$90 million is for Continuums of Care, and \$80 million is for counties. These funds will build on the regional collaboration that began with HEAP and with Round 1 of HHAP to develop unified regional responses to homelessness. To receive funds, eligible entities will apply to the Homeless Coordinating and Financing Council (HCFC) demonstrating how they have coordinated, and will continue to coordinate, with other local agencies in resolving homelessness on a regional level. The \$300 million may be used for operating costs for Homekey facilities and for evidence-based solutions that include rapid rehousing; rental subsidies; subsidies for new and existing housing and emergency shelters; services such as workforce, education, and training programs to support housing stability; and increasing permanent housing through efforts that include hotel and motel conversions.

With strategic funding to maintain fiscal sustainability while continuing to make investments, the Budget includes \$1.2 billion across multiple departments and programs to aid local governments addressing homelessness:

2020-21 Homelessness Funding

(Dollars in Millions)

| <i>Department</i> | <i>Program</i> | <i>Amount</i> |
|---|--|-----------------------|
| State/Local Governments | CARES Act - Coronavirus Relief Fund: Homekey | \$550.0 |
| | Federal Funded Programs for Homelessness | \$45.0 ^{1/} |
| Department of Housing and Community Development | Local Aid for Homelessness | \$300.0 |
| | Homekey Operating Subsidies | \$50.0 |
| | Various | \$6.0 |
| Office of Emergency Services | Various Homeless Youth Programs | \$6.0 |
| | Youth Emergency Telephone Network | \$0.6 |
| Department of Social Services | CalWORKS Homeless Assistance Program | \$154.3 ^{2/} |
| | Housing and Disability Advocacy Program | \$25.0 |
| Department of Health Care Services | Project for Assistance in the Transition from Homelessness | \$8.8 |
| University of California | Basic Needs Funding - Student Hunger and Homelessness Programs | \$15.0 ^{3/} |
| | Rapid Rehousing | \$3.5 |
| California Community Colleges | Rapid Rehousing | \$9.0 |
| California State University | Rapid Rehousing | \$6.5 |
| Total | | \$1,179.7 |

1/ This amount reflects programs that receive federal funds, such as the Emergency Solutions Grant program. Unawarded COVID-19 related relief funds (e.g., CARES Act) are not reflected.

2/ Amount is dependent on caseload and utilization.

3/ This program supports basic needs partnerships for low-income students facing housing or food insecurity.

LOCAL GOVERNMENT

DIRECT CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT (CARES ACT) ALLOCATIONS FOR CITIES AND COUNTIES

The Budget provides a portion of the state's CARES Act funding to local governments—\$500 million to cities and \$1.3 billion to counties—to combat the COVID-19 pandemic.

- **Cities**—The Budget provides \$225 million to cities with populations greater than 300,000 that did not receive a direct CARES Act allocation from the federal government, with the funds distributed according to their relative populations. Another \$275 million is provided to cities with populations less than 300,000, with the funds distributed according to their relative populations, with each city guaranteed

a minimum of \$50,000. Recipients must use the funds according to federal law, and are encouraged to prioritize these funds to support efforts by counties and Continuums of Care to address the impact of the COVID-19 pandemic on people experiencing homelessness.

- **Counties**—The Budget provides \$1.3 billion to counties, with the funds distributed according to their relative populations. Recipients must use the funds according to federal law, and are encouraged to prioritize these funds to address the public health, behavioral health, and other health and human services needs that have arisen as a result of the COVID-19 pandemic.

Funding is contingent on adherence to federal guidance, the state's stay-at-home and other health requirements as directed in executive orders, statutes, and all State Department of Public Health orders, directives, and guidance issued in response to the COVID-19 pandemic. To receive funds, cities and counties must submit an application to the Department of Finance certifying their agreement to comply with these requirements. This certification form can be found on Finance's website and must be submitted by July 10.

REALIGNMENT BACKFILL FOR COUNTIES

The Budget includes \$750 million General Fund to provide support for counties experiencing revenue losses for realigned programs. Counties will prioritize support for health and human services, entitlement programs, and programs that serve vulnerable populations. In using these funds, counties will adhere to federal guidance and state health requirements related to the COVID-19 pandemic. To the extent the federal government provides sufficient eligible funding by October 15, 2020, an additional \$250 million may be provided to counties for the aforementioned purposes.

Other Significant Adjustments

- **Homeless Coordinating and Financing Council Administrative Resources**—The Budget includes \$1.5 million General Fund ongoing and 10 permanent positions to effectively carry out statutory mandates and strengthen its strategic coordination of the state's efforts to address homelessness.
- **Homeless Data Integration System**—The Budget includes statutory changes to allow the HCFC to establish a statewide Homeless Data Integration System. The system will consolidate existing homelessness data from the individual Continuums of Care

throughout the state and allow the state to understand the demographics and shared characteristics of the homeless population.

LABOR AND WORKFORCE DEVELOPMENT

The Labor and Workforce Development Agency addresses issues relating to California workers and their employers and helps businesses and workers thrive in California. In light of the unprecedented increase in unemployment due to the COVID-19 Recession, the Budget includes vital investments as California begins to recover.

ENFORCEMENT OF LABOR LAWS

Chapter 296, Statutes of 2019 (AB 5) established a new statutory employment test to determine whether a worker may be classified as an independent contractor instead of an employee for certain purposes. Under AB 5, all workers are classified as employees unless the employer can demonstrate a worker meets specified conditions, known as the ABC test. The Budget provides resources to implement AB 5, including \$17.5 million for the Department of Industrial Relations, \$3.4 million for the Employment Development Department (EDD), and \$780,000 for the Department of Justice. These resources will allow these state entities to train employees on the employment determination test and to conduct more hearings, investigations, and litigation related to AB 5.

PAID FAMILY LEAVE

Throughout the year, the Administration convened several Task Force meetings comprised of experts representing workers, early education, legislative staff, and employers to develop recommendations to expand the Paid Family Leave (PFL)

program. The Task Force developed a long-term, step-by-step plan so that policy changes could be phased in over time. As a first step, the Task Force focused on expanding job protections.

The Administration is committed to expanding job protections this year, and the Budget includes \$1 million General Fund to support the training needs of small businesses with employees utilizing the PFL program.

UNEMPLOYMENT INSURANCE

Demand for unemployment insurance (UI) benefits in California continues to grow as a result of the impact of the COVID-19 Recession. Since mid-March, the EDD has received approximately 6 million UI claims, including 5 million regular UI claims and 1 million Pandemic Unemployment Assistance (PUA) claims, and provided \$37 billion in UI claim benefits.

The Budget includes an increase of \$38 billion to reflect the projected increase in UI benefit payments. The Budget also includes \$126.3 million and 777 positions to reflect additional federal funding and the projected workload increase to process UI benefit claims. Much of these resources are federally funded as a result of recently enacted federal legislation in response to the COVID-19 pandemic. This includes the Federal Pandemic Unemployment Compensation program that provides a temporary emergency increase of \$600 per week in addition to the regular UI weekly benefit through July 31, 2020. It also includes the PUA program to provide up to 39 weeks of UI benefits to individuals who do not qualify for traditional unemployment compensation, including business owners, the self-employed, independent contractors, and other individuals not usually eligible for regular state UI benefits who are unemployed as a direct result of the COVID-19 pandemic. The PUA program runs through December 26, 2020.

Under federal law, states that exhaust their UI trust fund may borrow from the federal UI trust fund to continue UI benefit payments. Pursuant to the Families First Coronavirus Response Act enacted in March, interest on federal loans are waived through December 31, 2020. The federal government has also authorized California to borrow as needed to continue paying benefits to eligible UI benefit claimants. Like other states, California has already begun borrowing.

The Budget also includes statutory changes through January 1, 2021 that conform the state's UI program to federal guidelines in order to receive additional federal UI administration funds. States must ease eligibility requirements and access to

unemployment compensation for claimants and relieve employers of benefit charges related to the COVID-19 pandemic. California qualifies for approximately \$120 million in federal unemployment administration funds.

Other Significant Adjustments

- The Budget also includes \$46 million to continue implementation of the Benefit Systems Modernization project. This project will modernize and consolidate the EDD's UI, Disability Insurance, and PFL benefit systems. The state of EDD's information technology system and the need to replace it has come into sharp focus during the COVID-19 pandemic as millions of Californians have accessed the system to apply for UI benefits.
- Finally, the Budget provides a \$10 million General Fund investment for the Social Entrepreneurs for Economic Development initiative, providing entrepreneurial training for individuals, including those who are undocumented. The purpose of this initiative is to support economically disadvantaged communities facing significant barriers to employment by advancing economic mobility through entrepreneurial opportunities and spurring economic and racial justice alongside economic contributions to the state.

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JUDICIAL BRANCH

The Judicial Branch consists of the Supreme Court, Courts of Appeal, trial courts, and the Judicial Council. The trial courts are funded with a combination of General Fund, county maintenance-of-effort requirements, fines, fees, and other charges. Other levels of the Judicial Branch receive most of their funding from the General Fund.

The Budget includes total funding of \$4.0 billion (\$2.1 billion General Fund and \$1.9 billion other funds) in 2020-21 for the Judicial Branch, including \$1.5 billion General Fund and \$1.2 billion other funds to support the trial courts. The Budget also includes \$190 million General Fund and \$147 million other funds to support programs offered by trial courts such as Court Appointed Dependency Counsel, California Collaborative and Drug Court Projects, and the Equal Access Fund, among others. For the State Level Judiciary, which is comprised of the Supreme Court, Courts of Appeal, the Judicial Council, and the Habeas Corpus Resource Center, the Budget includes \$491.3 million General Fund and \$497.2 million other funds.

MAINTAINING ACCESS TO JUSTICE

OPERATIONAL CHANGES IN RESPONSE TO COVID-19

The Judicial Branch has had to radically change its operations to protect the public from the spread of COVID-19 while also maintaining access to justice. Actions taken by the Judicial Council include extending court deadlines, suspending jury trials, using

JUDICIAL BRANCH

technology to conduct proceedings remotely, and suspending evictions and foreclosures. Trial courts have also taken actions to protect the public by closing courthouses and courtrooms, limiting operations to only essential court functions, and suspending collection activities, among others.

These actions have resulted in delays in court operations and a backlog of cases that will take time for the courts to process as they continue to practice physical distancing. In an effort to help the trial courts address the backlog and resume normal operations, the Budget includes \$50 million one-time General Fund in 2020-21.

The COVID-19 pandemic has required the Judicial Branch to reevaluate processes and like the rest of state government, the Judicial Branch should use this opportunity to improve court operations. The Budget includes \$25 million General Fund in 2020-21 and 2021-22 for modernizing court operations with the goal of achieving efficiencies and increasing access to court services online. For example, the Judicial Council may allocate this funding for projects such as enabling electronic case filing, digitizing court documents, resolving disputes online, and utilizing video technology to facilitate remote participation in hearings. These efficiency efforts are even more important now to maintain access to justice.

As a result of the COVID-19 Recession and absent the receipt of additional federal funds to assist the state with the fiscal crisis, reductions are necessary to balance the state budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year as follows:

- **Trial Courts**—A base reduction of \$176.9 million General Fund in 2020-21 and ongoing. If the federal government provides sufficient funding, \$126.9 million will be triggered off in 2020-21. The amount that would be restored in 2020-21 is lower because the Budget includes a \$50 million one-time augmentation for the trial court caseload backlog.
- **State Level Judiciary**—A decrease of \$23.1 million General Fund in 2020-21 and ongoing, all of which will be triggered off if the federal government provides sufficient funding.

Other Significant Adjustments

- **Fine and Fee Revenues**—The Budget includes an additional \$238.5 million one-time General Fund in 2020-21 to backfill declining fine and fee revenues: \$90.9 million in 2019-20 and \$147.6 million for 2020-21.
- **Trial Court Employee Benefits**—\$30 million ongoing General Fund for trial court employee health benefit and retirement costs.
- **Language Access**—\$9.9 million General Fund in 2020-21 and \$9.6 million General Fund annually thereafter for increased costs for court interpreters and to purchase equipment for the newly established Video Remote Interpreting Program.
- **County Law Libraries**—\$7 million one-time General Fund to backfill the County Law Libraries for lost revenue due to the reduction in civil case filings from the COVID-19 pandemic.

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PUBLIC SAFETY

This Chapter describes items in the Budget related to California's correctional system and public safety programs.

DEPARTMENT OF CORRECTIONS AND REHABILITATION

The California Department of Corrections and Rehabilitation (CDCR) incarcerates people convicted of the most violent felonies, supervises those released to parole, and provides rehabilitation programs to help them reintegrate into the community. The Department strives to facilitate the successful reintegration of the individuals in its care back to their communities equipped with the tools to be drug-free, healthy, and employable members of society by providing education, treatment, and rehabilitative and restorative justice programs.

The Budget sustains prior investments that support the Administration's long-term goals of further improving rehabilitation, reentry and restorative justice programs. It also reflects the Administration's commitment to limit the expansion of new programs due to the drastic budget impacts of the COVID-19 Recession, reduce costs through efficiencies, and implement long-term prison reform strategies.

The Budget includes total funding of \$13.4 billion (\$13.1 billion General Fund and \$311 million other funds) in 2020-21 for the Department.

PRISON CAPACITY

The adult prison population has declined steadily over many years, presenting opportunities for CDCR to reduce its reliance on contract prison capacity. After more than a decade, CDCR terminated its final remaining contract to house inmates out-of-state in June 2019. In addition, CDCR terminated its final remaining contract with a private in-state facility for male inmates in May 2020. Based on current population trends, the Administration plans to close the remaining three male, public in-state contract correctional facilities in 2020-21.

In addition, the Budget plans to close one state-owned correctional facility beginning in 2021-22 and a second facility beginning in 2022-23. While statutory authority is not necessary to implement the prison closure plan, the Budget agreement included statutory changes that would have specified a reporting timeline and considerations to be made in determining which prisons should be prioritized for closure. These closures will be achieved through various actions that will further reduce the prison population through rehabilitation, which are described below.

COVID-19 RESPONSE

CDCR took a series of proactive measures to reduce the presence and spread of COVID-19 in its institutions. Among other things, CDCR restricted inmate movement, activated gyms and dayrooms to create physical distancing, modified the parole suitability hearing process to take place by video and telephone conference, restricted family visitation and provided inmates with free telephone calls, initiated a staff screening process upon entering facilities, suspended large-scale construction projects within the secure perimeter of CDCR facilities, and suspended in-person rehabilitative programs and education classes. CDCR also delayed the Basic Correctional Officer Academy and modified the training to provide for social distancing, and employed the California Prison Industry Authority to produce cloth face masks and hand sanitizer for inmates and staff.

Before an incarcerated person is released from any institution, they are offered testing for COVID-19 within seven days of their anticipated release. For those who test positive, CDCR works with state and local public health and law enforcement officials to find housing where the incarcerated person can be safely isolated and monitored. Individuals are also released with reusable cloth barrier masks provided by the Department with appropriate precautionary measures taken during transportation.

Beginning in June 2020, CDCR also began expanded employee testing for COVID-19 at skilled nursing facilities consistent with guidance from the California Department of Public Health. This guidance includes baseline testing of all employees by the end of June, and separate protocols for continued testing, the frequency of which is dependent on whether an institution has active outbreaks. Beginning in July 2020, CDCR expects to expand employee testing protocols to the remaining institutions without skilled nursing facilities.

On March 24, 2020, the Governor issued Executive Order N-36-20, to mitigate the spread of COVID-19 in the state's adult institutions by stopping intake for 30 days, which was subsequently extended to 60 days. While intake resumed on May 29, 2020, CDCR is proceeding with an abundance of caution. For example, the Department is offering testing to all inmates upon intake and has instituted a mandatory 14-day quarantine period in its reception centers. CDCR estimates that approximately 8,200 inmates will be held in county jails as a result of the suspension of intake for 60 days and anticipates transferring all those inmates to CDCR in the coming months.

In addition, CDCR initiated the release of inmates who were within 60 days of release at the beginning of April 2020, and who were not serving a current term for domestic violence, a violent felony, or required to register as a sex offender. These actions have contributed to a significant decline in the prison population. As of June 17, 2020, the adult inmate population was 114,643, compared to 122,941 as of March 25, 2020, a reduction of 8,387 inmates.

At the time of this publication, court orders and changing conditions are requiring additional actions to mitigate the spread of COVID-19 and protect staff and inmates.

EARNING RELEASE THROUGH REHABILITATION

The Budget sustains academic, vocational and rehabilitative program investments made in recent years to continue the progress made to support inmates in preparing for release. These investments in rehabilitation, as well as additional actions highlighted below, will allow the Department to safely reduce the prison population and achieve the prison closures described above.

- **Reducing Reception Center Process to 30 days**—The suspension of intake provided CDCR the opportunity to move the majority of inmates from reception centers to mainline institutions, thereby creating space in the reception centers to facilitate safely reopening intake. CDCR plans to reduce the reception center process to as

few as 30 days instead of 90 to 120 days. This will allow inmates to begin participating in academic and rehabilitative programs sooner and will likely enable CDCR to convert some existing Reception Center housing to General Population housing in 2020-21. This change is expected to save \$3.7 million General Fund in 2020-21, and significantly more in future years with the exact amount depending on the timing and details of future prison closures.

- **Changes to Good Conduct Credits**—CDCR will pursue changes to good conduct credits that will be applied prospectively. These changes will provide greater incentives for individuals to engage in good conduct such as by participating in work and program assignments. While the changes are still being developed, the preliminary estimate is that these changes will save \$2.7 million General Fund in 2020-21.

TEMPORARY MODIFIED WORK ASSIGNMENTS

The Budget includes \$16.7 million General Fund annually for two years to provide modified work assignment posts for staff with medical conditions that result in restrictions or limitations, such as pregnancy, to provide them opportunities to continue working or return to work earlier than would otherwise be possible. This proposal advances the Administration's commitment to the health and wellness of its correctional staff and promotes the recruitment and retention of a diverse workforce. The Department will use the period covered by the limited term funding to determine the appropriate level of ongoing resources for this program.

The Budget also includes the following General Fund investments:

- **Mental Health Psychiatry Registry**—\$13.3 million for contract psychiatry services to meet the federal court order to fill at least 90 percent of the state prison system's psychiatry positions.
- **Intake Cell Retrofits for Suicide Prevention**—\$3.8 million one-time to retrofit 64 intake cells across the state to provide a safer environment for inmates entering segregated housing.
- **Expansion of Statewide Telepsychiatry Program**—\$5.9 million to support expansion of telepsychiatry, which uses secure videoconferencing to increase inmate access to mental health care services.

- **Legionella Remediation at California Health Care Facility**—\$9.7 million in 2019-20 and \$4.3 million ongoing to establish new water system protocols to control Legionella bacteria and minimize the risk of illness at the California Health Care Facility.
- **Information Technology Security Staffing and Tools**—\$2.9 million for additional resources to strengthen security and cybersecurity infrastructure to protect patient health records.
- **Medical Imaging Equipment**—\$1 million to replace and maintain CDCR's medical imaging equipment.
- **Secure Electronic Data Share Unit for Patient Health Records**—\$377,000 to support an electronic health care data exchange process to transfer health records to counties for inmates who are transitioning to county custody or the community.

VALLEY STATE PRISON YOUTH OFFENDER REHABILITATIVE COMMUNITY

The Budget includes \$1.3 million General Fund in 2020-21, and \$2 million ongoing, to establish a Youth Offender Rehabilitative Community at Valley State Prison in Chowchilla. The program will house individuals under the age of 26 together in a campus-style environment conducive to positive behavioral programming and will deliver educational programs targeted to their unique needs.

OTHER SIGNIFICANT ADJUSTMENTS

- **Consolidate Fire Camps**—The Budget includes the closure of eight camps, currently not at capacity, that will be selected in coordination with the California Department of Forestry and Fire Protection. The locations selected will take into consideration proximity to other fire camps in an effort to minimize impacts to communities that rely on the services provided by inmate fire crews. CDCR's savings are estimated to be \$7.4 million General Fund in 2020-21 and \$14.7 million ongoing.
- **Draw Down Federal Funds for Health Care for Community Reentry Programs**—Under federal policy, individuals who are considered prison inmates are ineligible for Medicaid benefits. However, this exclusion does not apply to individuals residing in supervised residential treatment facilities, such as reentry facilities designed to transition individuals from prison to the community. The Centers for Medicare and Medicaid Services (CMS), which sets these policies, recently issued guidance outlining how it distinguishes between prisons and supervised residential treatment facilities. Specifically, CMS has stated that in order to qualify for Medicaid eligibility residents must generally have freedom to seek employment in the community and

access resources available to the general public, such as education, libraries, and healthcare facilities. CDCR is implementing operational changes at its reentry facilities to adhere to these guidelines in a manner that ensures public safety, thereby allowing the state to draw down federal funding for residents' health care and saving \$4.2 million General Fund in 2020-21 and \$8.5 million ongoing.

- **Eliminate the Integrated Services for Mentally Ill Parolee Program**—The Integrated Services for Mentally Ill Parolee Program provides wraparound services, including some transitional housing, for approximately 1,500 of 18,000 mentally ill parolees. As this program is costly at \$10,000 per parolee annually and has shown limited effectiveness at reducing recidivism, the Budget eliminates the program. The Department will adjust policies to connect these individuals with community resources, which ultimately provide better continuity of care long-term. Elimination of this program is expected to result in savings of \$8.1 million General Fund in 2020-21 and \$16.3 million ongoing General Fund. Although the Budget reduces funding for the program, statutory changes are necessary to eliminate the program.
- **Remote Court Appearance**—CDCR will pursue efforts to increase video capabilities to enable remote court appearances by inmates and staff. This will result in efficiencies associated with transportation of inmates from their assigned prison to a prison closer to the court, and daily transportation of inmates to court. This will also reduce inmate absences from rehabilitation and work assignments. Statutory changes are needed to implement this proposal.
- **Suspension of the Transition-Aged Youth Pilot in the Division of Juvenile Justice**—The Budget suspends the seven-year pilot program operated by the Division of Juvenile Justice to divert transition-aged youth from adult prison to a juvenile facility. The pilot had limited participation and its suspension will result in estimated savings of \$3.1 million General Fund in 2020-21 and ongoing. Although the Budget reduces funding for this program, statutory changes are necessary to suspend the pilot.
- **Integrated Substance Use Disorder Treatment Program Reduction**—The Budget implements a one-time reduction of \$30 million to the Integrated Substance Use Disorder Treatment Program reflecting expected challenges in full program implementation due to the COVID-19 pandemic.

PAROLE

CAP PAROLE TERMS

In an effort to align community supervision terms with evidence that most recidivism occurs earlier in the supervision period, create incentives for positive behavior change, and more effectively use limited state resources, the Budget will cap supervision for certain parolees at 24 months and establish earned discharge for non-Penal Code section 290 registrants at 12 months. The estimated savings are expected to be \$23.2 million General Fund in 2020-21, increasing to \$64.6 million ongoing General Fund in 2023-24. The Budget includes a reduction of funding associated with this proposal. However, statutory changes are necessary to implement the proposal and realize these projected savings.

EXPANDING THE ELDERLY PAROLE PROGRAM AND COMPASSIONATE RELEASE

The Budget agreement includes additional opportunities for elderly and terminally ill inmates to be released from custody. Statutory changes are necessary to modify the existing Elderly Parole Program to lower the criteria for eligibility for an elderly parole suitability hearing from inmates aged 60 or older who have served 25 continuous years of a sentence to inmates aged 50 or older who have served 20 continuous years.

The Budget agreement also expands the compassionate release process whereby the Secretary of the CDCR can request the court resentence an inmate diagnosed with an incurable condition that will result in death within twelve months. Statutory changes are necessary to implement this proposal.

These changes are anticipated to result in General Fund cost savings in future years while simultaneously providing consideration for release to inmates at high-risk for COVID-19 and who are not likely to recidivate.

INMATE MEDICAL CARE AND MENTAL HEALTH SERVICES

The Budget continues the state's significant financial commitment to improve the Department's delivery of health care services to inmates. The Budget dedicates \$3.6 billion General Fund for health care services programs, which provide access to mental health, medical, and dental care that is consistent with the standards and scope of services appropriate within a custodial environment.

OTHER SIGNIFICANT ADJUSTMENTS

The Budget also removes \$20.6 million from CDCR's baseline budget to eliminate the Tattoo Removal Program (\$2.1 million) and by reducing ongoing prison maintenance funding (\$18.5 million).

Although the state is not in a fiscal position to expand many programs given the drastic budget impacts of the COVID-19 Recession, the Budget provides \$943,000 to promote objectivity and fairness in the investigation of equal opportunity complaints and \$37.6 million for necessary roof replacements at California State Prison, Sacramento.

REALIGN DIVISION OF JUVENILE JUSTICE

The Division of Juvenile Justice currently houses approximately 800 youth. The Governor's Budget proposed to transfer the Division of Juvenile Justice to a newly created independent department within the Health and Human Services Agency. That approach was intended to align the rehabilitative mission of the state's juvenile justice system with trauma-informed and developmentally appropriate services supported by programs overseen by the state's Health and Human Services Agency. The May Revision proposed instead to transfer the responsibility for managing all youth to local jurisdictions and direct a portion of the state savings to county probation departments.

The Administration continues to support the shift of this population to local jurisdictions and will continue to work with the Legislature and relevant stakeholders over the coming weeks to develop a plan for implementing a successful realignment.

CONFORMING STATUTE TO REALIGNMENT

The Budget agreement includes changes to existing law to clarify that an individual's underlying offense determines whether their sentence is served in a county jail or state prison. Currently, if an enhancement qualifies for state prison, the entire sentence is served in state prison—even though the underlying offense would otherwise be served in a county jail. CDCR estimates these changes will affect several dozen individuals annually and reduce the prison population by around 150 inmates on an ongoing basis. Statutory changes are necessary to implement this proposal.

LOCAL PUBLIC SAFETY

Proposition 47 Savings—In November 2014, voters passed Proposition 47 which requires misdemeanor rather than felony sentencing for certain property and drug crimes and permits inmates previously sentenced for these reclassified crimes to petition for resentencing. The Department of Finance currently estimates net savings of \$102.9 million General Fund for Proposition 47 when comparing 2019-20 to 2013-14. These funds will be allocated according to the formula outlined in the initiative.

Post Release Community Supervision—The Budget includes \$12.9 million General Fund for county probation departments to supervise the temporary increase in the average daily population of individuals on Post Release Community Supervision as a result of the implementation of Proposition 57.

COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING

To meet the short-term needs of local law enforcement training due to the COVID-19 pandemic and the potential long-term impact of reduced state and local budgets, the Commission on Peace Officer Standards and Training (POST) will leverage existing funding provided in the 2018 Budget Act to provide for the strategic development and implementation of a framework to support distance learning opportunities for all California law enforcement agencies.

Specifically, the Budget reappropriates \$10 million General Fund to: (1) create a Distance Learning Grant Program, (2) increase the functionality of POST's Learning Portal, and (3) upgrade previously produced and developed distance learning courses and videos.

The Budget establishes a Distance Learning Grant Program to allocate \$5 million to governmental entities and non-profit law enforcement educational institutions to develop and deliver training through innovative, distance learning modalities with a focus on use of force and de-escalation, implicit bias and racial profiling, community policing, cultural diversity, and organizational wellness.

The POST Learning Portal is a secure website available for California peace officers, dispatchers, and law enforcement instructors to access self-paced training courses and applications to support law enforcement training in California. Access to the Learning Portal is free to California law enforcement in the POST program. POST will explore replacing, enhancing, and/or modernizing the functionality of the Learning Portal by

adding and incorporating additional modules that would provide law enforcement agencies the ability to develop their own agency-specific courses to develop and deliver their own instructor-led distance training.

Finally, POST will identify and upgrade existing distance learning courses and videos that are in legacy software formats no longer supported. By converting these materials, POST can ensure that relevant training materials continue to be accessible to local law enforcement agencies. POST also anticipates continued creation of high-quality, online in-service and specialized training videos that enable law enforcement to meet Continuous Professional Training mandates through distance learning options.

To reduce costs, the Budget also reverts \$16.5 million General Fund appropriated in prior budgets provided to POST for training reimbursements and grants that are unlikely to be expended given the restrictions associated with the COVID-19 pandemic.

VICTIM SERVICES

Crime victims and their families bear significant physical, emotional, and financial burdens. The Budget reflects the Administration's continuing commitment to both assist crime victims and their families in recovering from such traumas, and to proactively make strategic investments to protect those who face a high risk of victimization by including the following proposals:

- **Restitution Fund Backfill**—\$23.5 million one-time General Fund to backfill declining fine and fee revenues in the Restitution Fund, allowing the Victim Compensation Board to continue operating at its current resource level.
- **California Violence Intervention and Prevention (CalVIP) Grant Program**—\$9 million ongoing for the Board of State and Community Corrections to continue funding the CalVIP program, which provides competitive grants to cities and community-based organizations to support services such as community education, diversion programs, outreach to at-risk transitional age youth, and violence reduction models.

IMPROVING INDIGENT DEFENSE

Currently, the Office of the State Public Defender's mission is focused on assisting individuals sentenced to death with post-conviction appeals. The Budget includes \$4 million General Fund in 2020-21 and \$3.5 million annually thereafter to expand the Office's mission to include improving the quality of indigent defense services provided

by counties. Specifically, these resources are intended to provide training and technical assistance for attorneys providing indigent defense, with the goal of promoting more effective representation statewide. While there is funding in the Budget, statutory changes are needed to expand the Office's mission to allow for these activities.

In addition, the Budget includes \$10 million one-time General Fund for the Board of State and Community Corrections to administer a pilot program, in consultation with the Office of the State Public Defender, to supplement local funding for indigent criminal defense. This funding will also support the completion of an evaluation to determine the effectiveness of the grants in improving indigent defense services.

DEPARTMENT OF JUSTICE

As chief law officer of the state, the Attorney General has the responsibility to see that the laws of California are uniformly and adequately enforced. This responsibility is fulfilled through the diverse programs of the Department of Justice (DOJ). The Department provides legal services on behalf of the people of California; serves as legal counsel to state agencies; provides oversight, enforcement, education, and regulation of California's firearms laws; provides evaluation and analysis of physical evidence; and supports data needs of California's criminal justice community. The Budget includes total funding of approximately \$1.1 billion, including \$369.2 million General Fund in 2020-21, to support DOJ.

BUREAU OF FIREARMS

The Bureau of Firearms regulates and enforces the manufacture, sale, ownership, safety training, and transfer of firearms. In recent years, several laws have been enacted that affect the purchase and ownership of a firearm in California, thereby increasing the Bureau's workload. The Budget continues the Administration's commitment to strengthen gun violence protections by including the following significant investments:

- **Firearm Precursor Parts (AB 879)**—\$5.9 million General Fund in 2020-21 and \$8.3 million in 2021-22 to regulate and track the sale of firearm precursor parts. AB 879 requires the sale of firearm precursor parts to be conducted by or processed through a licensed firearm precursor part vendor beginning July 1, 2024. Precursor parts can be used to manufacture “ghost guns” that are untraceable due to a lack of serial numbers or identifying markers. Given the risk that such guns present to

public safety, the Budget includes resources to accelerate the implementation of these requirements to July 1, 2022. However, statutory changes are needed to facilitate this acceleration.

- **Firearms Information Technology Modernization**—\$2.4 million Dealers' Record of Sale (DROS) Special Account to begin the planning and analysis phase of combining and modernizing the existing firearms tracking systems. DOJ currently tracks firearms using 11 information technology systems that are antiquated, costly to update, and inefficient at data collection. New firearms policies and reporting requirements are difficult to implement given the disconnected structure of these systems. Modernizing these systems will enable DOJ to respond to changing business needs and legislative mandates efficiently and in a cost-effective manner.
- **Semiautomatic Rifle Sales (SB 61)**—\$2.1 million DROS Special Account in 2020-21, \$1 million in 2021-22, and \$379,000 annually thereafter to implement and enforce the provisions of SB 61 that prohibit the sale of semiautomatic centerfire rifles to any person under 21 years of age, except a law enforcement officer or active duty member of the Armed Forces, and prohibit a person from making an application to purchase more than one semiautomatic centerfire rifle in any 30-day period.
- **Tracking Firearms Sales (SB 376)**—\$981,000 DROS Special Account in 2020-21, \$306,000 in 2021-22, and \$232,000 annually thereafter to track and report annual firearms sales, loans, and transfers to enforce the provision under SB 376 that reduces the threshold for which a manufacturer's license is required from 100 firearms manufactured annually to 50.
- **"Other" Firearm Registration**—\$128,000 DROS Special Account in 2020-21, \$862,000 in 2021-22, and \$14,000 annually thereafter to close regulatory loopholes for assault weapons that are not currently defined as a rifle, pistol, or shotgun. This proposal enables DOJ to appropriately define and regulate such weapons. While this funding is included in the Budget, statutory changes are needed to close this loophole and allow DOJ to regulate these firearms.

LEGAL SERVICES

HEALTHCARE RIGHTS AND ACCESS SECTION

In recent years, there has been an increase in healthcare litigation due to issues such as the opioid crisis, drug price-fixing, antitrust cases, and defenses of the Affordable Care Act. Currently, healthcare-related litigation is handled by separate units throughout DOJ. The Budget includes \$6.9 million in 2020-21 (\$3.7 million Attorney General Antitrust

Account and \$3.2 million Unfair Competition Law Fund) and \$6.7 million annually thereafter (\$3.6 million Attorney General Antitrust Account and \$3.1 million Unfair Competition Law fund) to establish the Healthcare Rights and Access Section to consolidate and centralize healthcare litigation within DOJ. This approach allows DOJ to handle the increase in healthcare litigation and develop expertise and specialization in this area of law.

Other Significant Adjustments

- **Bureau of Forensic Services**—\$35.8 million one-time (\$25.8 million General Fund and \$10 million Fingerprint Fees Account) to backfill the continued decline in fine and fee revenues in the DNA Identification Fund. This funding will enable DOJ to continue processing forensic evidence for client counties.
- **Criminal Records: Automatic Relief (Chapter 578, Statutes of 2019 (AB 1076))**—\$3.7 million Fingerprint Fees Account in 2020-21, \$4 million in 2021-22, and \$1.9 million annually thereafter to review records in statewide criminal justice databases to identify persons eligible to have their arrest or criminal conviction records withheld from disclosure and modify existing systems to grant such relief automatically. Statutory changes are needed to delay the implementation of AB 1076 until July 1, 2022. This will provide DOJ sufficient time to make the necessary information technology improvements to implement this bill.
- **California Law Enforcement Telecommunications System: Immigration (Chapter 789, Statutes of 2019 (AB 1747))**—\$2.8 million General Fund in 2020-21, \$2.9 million in 2021-22, and \$2.5 million annually thereafter to conduct investigations and audits to monitor compliance with AB 1747, which limits the use of the California Law Enforcement Telecommunications System for immigration enforcement purposes.
- **Replacement of License 2000 System**—\$724,000 one-time Gambling Control Fines and Penalties Account for the initial planning and analysis phase of replacing the License 2000 System, which is used by the Bureau of Gambling Control and Gambling Control Commission to manage cardroom licensing, registration, and auditing functions.
- **Sex Offender Registration (Chapter 541, Statutes of 2017 (SB 384)) Funding Alignment**—A net change of zero by moving \$4.8 million General Fund expenditures from 2020-21 and 2021-22 to 2022-23 and 2023-24, to align the funding to implement SB 384 with an updated implementation timeline. Statutory changes are needed to implement modifications to SB 384 that will ease the workload burden for DOJ, the courts, and local law enforcement agencies.

ELIMINATION OF CERTAIN CRIMINAL ADMINISTRATIVE FEES

State law authorizes state and local governments to charge administrative fees to individuals in the criminal justice system to recover costs for various activities, including probation supervision, representation by counsel, and diversion programs, among others. These fees can have a significant impact on low-income individuals and people of color who are disproportionately represented in the state's criminal justice system. Specifically, these fees often place an undue burden on those who cannot afford to pay and can create financial hardship for individuals seeking to get their lives back on track following a criminal conviction. Therefore, the Administration is committed to working with the Legislature to provide economic relief to this population by eliminating certain criminal administrative fees.

NATURAL RESOURCES

The Natural Resources Agency consists of 26 departments, boards, commissions and conservancies responsible for administering programs to conserve, restore, and enhance the natural, historical, and cultural resources of California. The Budget includes \$6.6 billion (\$3.6 billion General Fund, \$1.6 billion special funds, and \$1.4 billion bond funds) for programs included in this Agency.

DEPARTMENT OF WATER RESOURCES

The Department of Water Resources (DWR) protects, conserves, develops, and manages California's water. The Department also works to prevent and minimize flood damage, oversee the safety of dams, and educate the public about the importance of water and its efficient use.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Sustainable Groundwater Management Act (SGMA) was signed into law in September 2014. SGMA assigns the primary responsibility for ongoing groundwater management to local entities. Local agencies are required to form Groundwater Sustainability Agencies (GSAs) to then develop and implement Groundwater Sustainability Plans (GSPs) that identify actions and implementation measures to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge within 20 years of adoption. DWR is charged with two key responsibilities under SGMA:

NATURAL RESOURCES

(1) establishing the regulations for how a GSP must be prepared and assessing the GSP's likelihood of achieving sustainability, and (2) assisting the locals in preparing and implementing their GSPs through technical, planning, and other support.

The Budget includes \$9.6 million and 37 positions to further develop DWR's Sustainable Groundwater Management Program and provide critical assistance to GSAs. The resources included in the Budget are critical to advancing SGMA while assisting local communities with implementation of strong GSPs that can achieve groundwater sustainability and helping communities plan for major changes in groundwater management that could affect economic activity.

The state remains committed to supporting local communities' transition to sustainable groundwater use, and DWR will allocate \$26 million of existing Proposition 68 bond funds to local agencies in critically overdrafted basins to help defray the cost of implementation projects. In addition, a state interagency team will be created to work with stakeholders to identify tools and strategies to address the economic, environmental, and social effects of changing land use and agricultural production.

Other Significant Adjustments

- **American River Common Features Flood Control Project**—\$46 million one-time General Fund for the 2020-21 cost associated with a Sacramento region flood control project that leverages \$1.5 billion in federal funding.
- **New River Improvement Project**—\$18 million one-time General Fund and \$10 million Proposition 68 bond funds to support the New River Improvement Project, which will address solid waste and pollution exposure challenges in the City of Calexico, and support health, recreation, and economic benefits in the area.
- **Salton Sea Management Plan**—\$19.3 million Proposition 68 bond funds to address the air quality and habitat restoration objectives at the Salton Sea through implementation of the North Lake Pilot Project.

DEPARTMENT OF FISH AND WILDLIFE

The Department of Fish and Wildlife, which serves as a trustee for California's natural resources, has worked with stakeholders on a statutorily mandated service-based budget analysis. Preliminary results have identified gaps in specified levels of service. The Budget continues to support the Department in addressing service-based budget

gaps by making permanent approximately \$23.4 million General Fund that expires in 2020-21, and funding new mandates associated with recently chaptered legislation.

STATE PARKS

Many Californians lack access to parks, open spaces, and natural and cultural amenities. The Budget includes the following initiatives to expand access to state parks and open spaces and invest in cultural resources to share their value with the public and protect them for future generations:

- **Improving Access for Underserved Populations**—\$20 million General Fund to establish the Outdoor Equity Grants Program under Chapter 675, Statutes of 2019 (AB 209) to enable underserved and at-risk populations to participate in outdoor environmental education experiences at state parks.
- **Eliminate Cost as Barriers for Low-Income Individuals**—To increase participation in a program that provides free day-use entry, the Department will partner with state and county social and public health programs to increase use of the low-income pass program.
- **Establishing a New State Park**—\$5 million General Fund to create a new state park that is inclusive and supports equitable access for all Californians. The Department will work with various philanthropic, conservation, and park interest groups to secure a property and design the vision and operations for the new park.
- **Acquiring Lands to Expand Parks**—\$4.6 million bond funds to acquire inholding properties that expand existing state parks and provide other co-benefits such as protecting biodiversity.
- **Improving Facilities in Urban Areas**—\$6.1 million Proposition 68 bond funds to expand access to state parks in urban areas and make other improvements to parks that serve disadvantaged communities.
- **Enhancing Access Programming**—\$8.8 million Proposition 68 bond funds to expand both technological and physical access to parks, as well as culturally inclusive enhancements to park programming and interpretive exhibits.

The Budget includes the following fund shifts:

- **Indian Heritage Center**—\$95 million from the General Fund to lease revenue bonds. State Parks is in the process of completing the preliminary plans for the

project. Once the plans are finalized, the state can explore the option of financing the project from lease revenue bonds.

- **Deferred Maintenance**—\$44 million from the General Fund to Proposition 68 bond funds for deferred maintenance projects in the state parks system.

DEPARTMENT OF CONSERVATION

California is the nation's leader in reducing reliance on fossil fuels, limiting greenhouse gas emissions, and transitioning to a low-carbon economy. This transition includes strengthening oversight of oil and gas extraction to better protect people and the environment in a manner that facilitates a thoughtful economic transition.

The mission of California Geologic Energy Management Division (CalGEM) is to protect human health, safeguard the environment, and advance the state's climate and energy goals. The economic downturn resulting from the COVID-19 pandemic has increased the need to focus on the environmental and health and safety risks resulting from idle and deserted wells.

The Budget includes \$7.2 million Oil, Gas, and Geothermal Administrative Fund and 25 new positions for activities related to private oil companies operating in California having adequate financial coverage for idle and orphaned wells, and to improve public transparency related to natural gas and oil leaks and CalGEM's regulatory actions.

STRENGTHENING PARTNERSHIPS WITH TRIBES AND COMMUNITIES

Tribal communities have protected and preserved California's natural resources since before the state's inception. The Budget includes the following significant investments to strengthen collaboration with California Native American tribes directly affected by natural resource management decisions:

- **Truth and Healing Council**—\$100,000 annually through 2024-25 from the Environmental License Plate Fund to the Native American Heritage Commission to support the establishment of the Truth and Healing Council as identified in the Governor's Executive Order N-15-19.
- **Environmental Justice**—\$360,000 ongoing from the Environmental License Plate Fund to the Agency to establish the positions of Assistant Secretary for Environmental

Justice and Assistant Secretary for Tribal Affairs to support and expand the Agency's effort to institutionalize environmental justice and tribal consultation practices into its program planning, development and implementation.

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ENVIRONMENTAL PROTECTION

The California Environmental Protection Agency's programs promote the state's economic vitality in a sustainable manner by reducing greenhouse gas emissions, enhancing environmental quality, and protecting public health. The Secretary coordinates the state's regulatory programs and provides fair and consistent enforcement of environmental law. The Budget includes \$3.3 billion (\$126.6 million General Fund, \$3.2 billion special funds, and \$18.3 million bond funds) for programs included in this Agency.

PROTECTING VULNERABLE COMMUNITIES

The impacts of climate change and environmental pollution continue to be an urgent threat to the environment and vulnerable populations. The Budget continues to prioritize the protection of these vulnerable populations.

AIR QUALITY IN DISADVANTAGED COMMUNITIES

The Budget provides \$50 million Air Pollution Control Fund to support local air districts' implementation of Chapter 136, Statutes of 2017 (AB 617). This one-time funding supports local programs addressing the air quality disparities suffered by California's most disadvantaged communities. This funding will support local efforts to deploy community-scale air pollution monitoring, as well as to develop and execute community-driven pollution-reduction strategies.

CAP AND TRADE EXPENDITURE PLAN

The Cap and Trade Program is one of the key policies included in the 2017 Scoping Plan to achieve the 2030 emission-reduction target specified in Chapter 249, Statutes of 2016 (SB 32). The 2022 Scoping Plan Update will evaluate the state's progress towards achieving the SB 32 target and provide a path for achieving carbon neutrality by mid-century.

As part of the 2022 Scoping Plan Update, the Air Resources Board will evaluate and identify if any policies, including the Cap and Trade Program, should be adjusted through a subsequent rulemaking to keep the state on track to achieve the 2030 target and support further emission reductions to achieve carbon neutrality by mid-century.

While the enacted Budget does not include funding, the Administration will work with the Legislature in the coming months to enact a Cap and Trade Expenditure Plan for the 2020-21 fiscal year. Programs that are most protective of vulnerable communities, such as the Safe and Affordable Drinking Water program and the Community Air Protection program, should be prioritized.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Over the past year, the Administration has developed a vision for the future of the Department through stakeholder engagement, input from members and committees of the Legislature, and three public workshops conducted in Sacramento, Bakersfield and Los Angeles.

The Budget provides \$27.3 million General Fund to maintain current levels of funding at the Department.

Consistent with its commitment to protecting the state's most vulnerable communities from toxic pollutants, the Administration will work with the Legislature to secure long-term sustainable governance and fiscal reforms before the end of the legislative session.

STATEWIDE ISSUES AND VARIOUS DEPARTMENTS

This Chapter describes items in the Budget that are statewide issues or related to various departments.

TRANSFORMING STATE GOVERNMENT

The COVID-19 pandemic has disrupted state government operations, forcing the state to find creative ways to adapt and deliver core functions. It has also created an opportunity to rethink the way the state delivers services to its nearly 40 million residents. Investments in technology have already advanced the ability of government to deliver services during the current pandemic, and the state is committed to building on this progress to make California an example of what government should look like in the 21st century.

Transforming state government will include lessons learned from the state's real-time experiment with a statewide telework program. The state's response has shown that teleworking on a large scale is possible, and the ability to optimize a telework approach can reduce the state's carbon footprint and leased office space, while increasing the state's digital presence for the benefit of both California's employees and the people they serve.

GOVERNMENT EFFICIENCY

Led by the Government Operations Agency, the Administration will work with agencies and departments to examine their workforce to determine classifications and/or positions that can telework without disruption to serving the citizens of California. Increased telework can reduce statewide absenteeism, increase employee retention, promote inclusion, and move the state toward being an “employer of choice.” Telework is also environmentally favorable, as it reduces vehicle miles traveled and improves air quality.

The COVID-19 pandemic has challenged the state to reexamine in-person processes to protect state employees and the public. For example, the Department of Motor Vehicles (DMV) temporarily closed its field offices, but encouraged the public to use its alternative service channels such as online, mail, kiosks, and a new Service Advisor on DMV’s website. Additionally, DMV launched its Virtual Field Office to create new digital options for transactions with DMV staff that previously required an in-person office visit. As a result, a substantial majority of all DMV transactions can now be processed without a field office visit. The state will build on DMV’s successful pilot program and look to implement similar digital-based services in other agencies or departments that provide a direct service to the public.

In an effort to transform the way the state conducts business and serves Californians, the Administration will use the Office of Digital Innovation to assist agencies and departments to rethink how to meet the public’s needs, including by delivering more government services online. The state will build on the lessons learned through establishing the— <https://COVID-19.ca.gov> —website to build a new CA.gov website. The new site will be user-centered to allow Californians simple, easily understood transactions and to access all state information at a single portal.

WORKSPACE INNOVATIONS

With an increased remote workforce, the Administration, led by the Department of General Services (DGS), will evaluate the state’s real estate portfolio to determine which agencies and departments may be able to reduce lease space. Agencies and departments may be able to reconfigure their workspace to include additional meeting rooms and hoteling space, thereby reducing their lease footprint. Reducing space will decrease not only lease costs, but also energy costs. Additionally, DGS will look for possible restacking opportunities in state-owned buildings.

ADDITIONAL EFFICIENCY AND COST SAVINGS MEASURES

In addition to the efficiencies described above, the Budget includes a 5-percent reduction to nearly all state department budgets beginning in 2021-22.

- **Reduce Travel**

- Reduce statewide travel costs by using video conferencing for meetings or trainings, where possible.
- Reduce state fuel and insurance costs by assessing use of telematics (a mini GPS device that tracks distance, time, location, and speed) in state vehicles.

- **Improve State Processes**

- Improve processes and quality of services from the customer's point of view by encouraging agencies and departments to attend the Department of Human Resources' Lean Academy.
- Establish performance-based oversight of regulatory programs to better measure, track, and allocate limited resources based on predetermined program performance measures.

EMPLOYEE COMPENSATION

As a result of the COVID-19 Recession, and absent the receipt of additional federal funds, reductions in state employee compensation costs are necessary to balance the Budget. To the extent the federal government provides sufficient federal funds by October 15, 2020, which are eligible for purposes identified below, funds will be appropriated for the 2020-21 fiscal year.

The Budget includes a provision providing flexibility for the state and bargaining units to negotiate savings totaling roughly \$2.8 billion (\$1.4 billion General Fund), which is an approximate 10-percent reduction in employee compensation. As of June 26, 2020, the State has reached agreements with 16 of the 21 bargaining units, including the State Employees' International Union, Local 1000; California Association of Highway Patrolmen; California Correctional Peace Officers' Association; California Statewide Law Enforcement Association; Professional Engineers in California Government; California Association of Professional Scientists; International Union of Operating Engineers (bargaining unit 12); and American Federation of State, County, and Municipal Employees. The Administration continues to negotiate with the remaining

bargaining units. To achieve the necessary employee compensation savings, bargaining units that do not have ratified agreements prior to July 1, 2020, will be subject to furloughs.

The Budget authorizes the suspension of various employee compensation increases scheduled for Fiscal Year 2020-21; however, priority is given to targeted salary increases for the state's lowest paid workers. The Budget also authorizes funding for increases in health care premiums and enrollment for active state employees, and retiree health care prefunding for active employees.

STATE RETIREMENT CONTRIBUTIONS

The state makes all required pension payments for 2020-21. The Budget reflects the following actions:

- **California Public Employee's Retirement System (CalPERS) State Annual Pension Contribution Payment Offset**—Chapter 33, Statutes of 2019 (SB 90) authorized a \$3 billion General Fund supplemental pension payment toward the CalPERS state plans' unfunded liabilities with the goal of maximizing the state's savings over the next three decades. Of the \$3 billion, \$2.5 billion was paid to CalPERS in 2019. CalPERS applied approximately \$100 million of the \$2.5 billion to produce savings in the 2019-20 employer contributions. The Budget redirects the remaining \$2.4 billion over the next two years to pay the state's obligations that will produce more immediate savings to the state and results in a reduction in the state's retirement contribution in fiscal years 2020-21 and 2021-22.
- **Elimination of \$500 Million General Fund Supplemental Pension Payment to CalPERS**—The Budget eliminates the remaining \$500 million General Fund supplemental pension payment towards the CalPERS state plans' unfunded liabilities as authorized under SB 90. SB 90 was subsequently amended by Chapter 859, Statutes of 2019 (AB 118) to specify that of the \$500 million payment to CalPERS, \$243 million will be applied to the California Highway Patrol (CHP) retirement plan. The Budget instead authorizes the use of Proposition 2 debt repayment funding to make the \$243 million payment to the CHP retirement plan.
- **Suspension of the 2020-21 California State Teachers' Retirement Systems (CalSTRS) Defined Benefit Annual Rate Increase**—The Budget suspends the annual rate increases authorized by the Teachers' Retirement Board at the 2019-20 level in 2020-21.

Other Significant Adjustments

- **Surplus Money Investment Fund Loan**—The Budget includes \$221 million within the 2020-21 Proposition 2 debt payment requirement to pay down the General Fund's share of the internal cash loan authorized by Chapter 50, Statutes of 2017 (SB 84) to make a \$6 billion supplemental pension payment to the CalPERS state plans in 2017.
- **State Employees' Retirement Contributions**—The Budget includes \$7.0 billion (\$4.0 billion General Fund) for state contributions to CalPERS for state pension costs. This includes \$733 million General Fund for California State University pension costs.
- **Teachers' Retirement Contributions**—The Budget includes \$3.4 billion General Fund for state contributions to CalSTRS. The Budget also makes a \$297 million supplemental payment from the Proposition 2 required debt repayment funds.

The State Retirement and Health Care Contributions figure provides an historical overview of contributions to CalPERS, CalSTRS, the Judges' Retirement System (JRS), JRS II, and the Legislators' Retirement System for pension and health care benefits.

State Retirement and Health Care Contributions ^{1/ 2/ 4/}

(Dollars in Millions)

| | CalPERS ^{4/} | CSU CalPERS | CalSTRS | JRS | JRS II | LRS ^{5/} | Active Health & Dental ^{6/} | Retiree Health & Dental | CSU Retiree Health | Employer OPEB Prefunding ^{7/} |
|--------------------------|-----------------------|---------------------|---------|-------|--------|-------------------|--|-------------------------------|--------------------------|--|
| 2011-12 | \$3,174 | | \$1,259 | \$195 | \$58 | | \$2,439 | \$1,505 | | 0 |
| 2012-13 | 2,948 ^{8/} | \$449 ^{8/} | 1,303 | 160 | 51 | | 2,567 | 1,365 ^{8/} | \$222 ^{8/} | 0 |
| 2013-14 | 3,269 | 474 | 1,360 | 188 | 52 | \$1 | 2,697 | 1,383 | 225 | 22 |
| 2014-15 | 4,042 | 543 | 1,486 | 179 | 63 | 1 | 2,797 | 1,462 | 256 | 38 |
| 2015-16 | 4,338 | 585 | 1,935 | 190 | 67 | 1 | 2,968 | 1,556 | 263 | 63 |
| 2016-17 | 4,754 | 621 | 2,473 | 202 | 68 | 1 | 3,104 | 1,623 | 272 | 342 ^{10/} |
| 2017-18 | 5,188 | 661 | 2,790 | 199 | 80 | 1 | 3,192 | 1,695 | 285 | 189 |
| 2018-19 | 5,506 | 683 | 3,082 | 194 | 84 | 1 | 3,255 | 1,759 | 313 | 394 |
| 2019-20 | 5,946 | 716 | 3,323 | 263 | 87 | 1 | 3,443 | 1,892 | 331 | 562 |
| 2020-21 ^{3/ 9/} | 6,259 | 733 | 3,428 | 225 | 85 | 1 | 3,713 | 2,068 | 362 | 703 |

^{1/} The chart does not include contributions for University of California pension or retiree health care costs.

^{2/} The chart does not reflect the \$6 billion supplemental pension payment to CalPERS in 2017-18 authorized by Chapter 50, Statutes of 2017 (SB 84), Chapter 33, Statutes of 2019 (SB 90), and Chapter 859, Statutes of 2019 (AB 118), authorized multiple one-time supplemental pension payments to CalPERS and CalSTRS, which are also not reflected in the chart. The impact of the adjustments to the SB 90 and AB 118 supplemental pension payments, as authorized as part of the 2020 Budget, are also not reflected in the chart.

^{3/} The Budget suspends the Teachers' Retirement Board's statutory authority to adjust the state contribution rate for fiscal year 2020-21. The amount shown excludes the additional \$297 million in supplemental pension payment from Proposition 2 debt payment funding authorized in the Budget.

^{4/} In addition to the Executive Branch, this includes Judicial and Legislative Branch employees. Contributions for judges and elected officials are included in JRS, JRS II, and LRS. Amounts displayed in this column reflect statewide contributions to the five CalPERS state plans, including contributions from employers that are not included in the annual Budget Act.

^{5/} The state continues to make employer contributions to the Legislators' Retirement System. CalPERS reported the estimated 2020-21 contribution amount is \$84,308.

^{6/} These amounts include health, dental, and vision contributions for employees within state civil service, the Judicial and Legislative Branches, and the California State University (CSU).

^{7/} Amount reflects the employer contribution to pay down the Other Post-Employment Benefits (OPEB) unfunded liability.

^{8/} Beginning in 2012-13, CSU pension and health care costs are displayed separately.

^{9/} Estimated as of the 2020 Budget Act. Of the total estimated 2020-21 contributions, contributions sourced from the General Fund are estimated to be \$4,015 million for CalPERS, \$733 million for CSU CalPERS, \$1,744 million for Active Health and Dental, and \$335 million for OPEB Prefunding. Fiscal year 2020-21 contributions to CalSTRS, JRS, JRS II, LRS, and Retiree Health & Dental (including CSU) are all General Fund costs.

^{10/} Amount includes a one-time prefunding contribution of \$240 million pursuant to Chapter 2, Statutes of 2016 (AB 133).

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

FAIRGROUNDS

The 77 fairgrounds throughout California that make up the Network of California Fairs have historically supported operations through revenue-generating activities with limited supplemental state support. A total of 53 of the 77 fairgrounds are state-affiliated

fairs and have state civil service employees. As a result of the COVID-19 pandemic, fairs are canceling revenue-generating activities and are projected to lose approximately \$98 million in revenue between March and June 2020, with revenue losses expected to continue.

Many fairs have little to no reserves and must initiate the layoff process immediately as they may become insolvent. The Budget includes \$40.3 million General Fund in 2019-20 to support state-affiliated fairs that are projected to have insufficient reserves to pay legally mandated costs that may be incurred during the state civil service layoff process, including staff salaries, payout of leave balances, and unemployment insurance.

The Administration will work with fairs, local governments, and partners toward alternative options given limited General Fund resources. The Administration plans to engage the Legislature and stakeholders over the course of the next year to develop a thoughtful approach to transition the state's relationship with fairs, while acknowledging the need to continue supporting properties that may be necessary for emergency operations.

FARM TO SCHOOL PROGRAM

Farm to School Programs are a vital way to improve the health and well-being of California schoolchildren through integrated nutrition education and healthy food access. Hundreds of millions of meals are served each year in California schools, and expanding opportunities for local food procurement that is tied to nutrition education is essential for establishing healthy eating habits that children can carry into adulthood. Procurement of more California Grown food also supports connecting California's agriculture to California consumers.

The Budget includes \$10 million one-time General Fund in 2020-21 and \$1.5 million annually thereafter for the California Department of Food and Agriculture to establish a Farm to School Grant Program. This program will help support California farmers and expand healthy food access in schools by providing grants to schools to establish programs that coordinate local and California Grown food procurement and utilization in school meals. It will also support food and agriculture education in classrooms and cafeterias through experiential learning opportunities in school gardens, on farms and through other culinary agricultural pathways. This funding will also support the Farm to School Working Group to advance farm to school implementation and explore how to create a more resilient and climate-smart food supply in California.

PROPOSITION 12

In November 2018, California voters approved Proposition 12, which expanded current animal housing requirements and established new, more stringent minimum space standards on housing for calves raised for veal, breeding pigs and egg-laying hens. The measure also makes it illegal for businesses in California to knowingly sell eggs or uncooked pork or veal that came from animals housed in a manner that does not meet the new confinement requirements, including products from animals raised and maintained at facilities located in California and out-of-state. The Department is finalizing statutorily mandated regulations to establish comprehensive program requirements.

The Budget includes \$1.4 million and 6 positions in 2020-21, and \$2.8 million and 15 positions ongoing to support full implementation of Proposition 12, and also includes statutory changes to establish new fee authority that will support associated program costs. This will be funded for two years by a short-term loan from the Food and Agriculture Fund until this new fee revenue can support all program costs.

Other Significant Adjustments

- Given the unprecedented budget impacts of the COVID-19 Recession, the Budget includes a baseline decrease of \$3.9 million General Fund ongoing beginning in 2020-21 associated with the reduction of funding for the California Biodiversity Initiative, which was provided in the 2019 Budget Act.

CALIFORNIA PUBLIC UTILITIES COMMISSION

BROADBAND EXPANSION

The COVID-19 pandemic has required significant numbers of Californians to telework, learn via distance education, and receive healthcare through telehealth. The movement toward these technology platforms highlights the state's inequities in access to computing devices, technology tools, and connectivity. In response, the California Public Utilities Commission (Commission) took action in April to help bridge this digital divide by making \$25 million available from the California Teleconnect Fund for hotspots and Internet service for student households, prioritizing rural, small, and medium-sized school districts. The Commission also made \$5 million available from the California Advanced Services Fund Adoption Account to help cover the cost of

computing and hotspot devices. The Commission coordinated with the California Department of Education and this funding is being prioritized toward low-income communities and communities with high percentages of residents with limited English proficiency.

To identify which areas of the state lack sufficient access to broadband, the Budget includes \$2.8 million and 3 positions from the Public Utilities Commission Utilities Reimbursement Account for the Commission to enhance its broadband mapping activities. This additional information will better inform the state's broadband infrastructure grant program, improve safety by providing broadband speed data at emergency response locations such as fairgrounds, and enhance the state's ability to compete for federal broadband funding.

The Budget also includes statutory changes intended to increase the ability of the state to compete for federal funding to improve access to broadband Internet in California.

WILDFIRE MITIGATION EFFORTS

Chapter 81, Statutes of 2019 (AB 111) added \$50.1 million in 2019-20 for the Commission to review and enforce utility wildfire mitigation plans and implement Chapter 79, Statutes of 2019 (AB 1054). These bills were enacted to facilitate consumer access to safe, reliable, and affordable power by providing a durable solution to the problems arising from utility-caused wildfires. The bills established a new Wildfire Safety Division, created procedures and standards applicable to catastrophic wildfire proceedings, and established a Wildfire Fund and mechanisms to capitalize the fund to protect ratepayers. The Budget provides 106 new positions and \$30 million for the Commission to address issues related to utility-caused wildfires.

PACIFIC GAS AND ELECTRIC BANKRUPTCY

In May, the Commission approved Pacific Gas and Electric's (PG&E) bankruptcy plan. As part of its approval of PG&E's plan, the Commission imposed a number of terms and conditions on PG&E, such as an enhanced oversight and enforcement process. Pursuant to the bankruptcy settlement, PG&E has until September 30, 2020, to successfully emerge from bankruptcy.

The Budget includes \$5 million for an observer to monitor PG&E's progress in wildfire preparation and public safety power shutoffs; conduct field visits, interviews, and

inspections. The state will seek reimbursement for these costs from PG&E through the bankruptcy process.

The Budget also provides for a loan of up to \$50 million to Golden State Energy (GSE), a nonprofit utility which will be established to take over PG&E should it fail to meet the deadline for its bankruptcy plan to become effective or to perform as a transformed utility in the future. These funds would be used for initial startup costs until GSE is able to secure revenues or financing.

DEPARTMENT OF MOTOR VEHICLES

In response to the COVID-19 pandemic, DMV temporarily closed its field offices to protect both its employees and the public.

DMV took several immediate actions to accommodate the needs of the public. All driver licenses that expire between March 1 and July 31, 2020, have been extended, and temporary paper extensions have been made available for seniors. The validity of expiring commercial driver licenses, endorsements, and certificates has been extended through September 30, 2020. In-person renewals have also been waived for eligible driver license and identification cardholders through July 28, 2020.

During its temporary closure, DMV began procuring personal protective equipment for its staff and developing plans to promote appropriate physical distancing within its offices for an eventual public reopening. DMV began a limited reopening of 25 field offices and 10 industry business centers on May 8 to honor existing appointments and serve customers whose unique transactions cannot be completed through one of DMV's multiple alternative service channels. All offices reopened to the public for appointments and limited services on June 11. Behind-the-wheel drive tests halted in mid-March and resumed on June 26 with additional safety protocols.

During the closures, DMV continued to encourage the public to utilize its alternative service channels such as online, mail, and kiosks. Customers can also use the Service Advisor on DMV's website to learn about service options. Additionally, DMV also quickly launched its DMV Virtual Field Office to create new digital options for transactions with DMV staff that previously required an in-person office visit. As a result, a substantial majority of all DMV transactions can now be processed without a field office visit.

The federal enforcement date by which a federally compliant driver license or identification will be required to board domestic flights or enter secure federal facilities has been extended until October 2021. DMV continues to be funded to provide REAL

IDs by this deadline. Now that offices have reopened, DMV is again able to address these and other transactional needs in field offices.

CANNABIS

The Governor's Budget included an announcement of the Administration's intention to consolidate the cannabis-regulatory functions in the Departments of Consumer Affairs, Food and Agriculture, and Public Health into a single Department of Cannabis Control, and stated more details would be submitted to the Legislature in the spring.

The Administration was in the process of developing a more detailed plan, including establishing workgroups tasked with building a foundation and infrastructure for the transition. However, this process was interrupted by the COVID-19 pandemic, requiring the Administration to evaluate its ability to implement the consolidation on July 1, 2020 as planned. Consequently, the consolidation and creation of the new department is on hold and will be pursued through the 2021 Budget process.

In light of the delayed cannabis consolidation effort, the Budget includes special fund proposals from each of the licensing entities to address expiring limited-term funding and positions. These proposals include \$68.2 million for the Department of Consumer Affairs, Bureau of Cannabis Control, \$20.3 million for the Department of Public Health, and \$42.4 million for the Department of Food and Agriculture to continue cannabis licensing and enforcement activities, as well as make improvements to enforcement including, but not limited to, proposed statutory changes to shift sworn investigators from the Department of Consumer Affairs' Division of Investigations to its Bureau of Cannabis Control.

2020-21 ALLOCATION OF THE CANNABIS TAX FUND

Proposition 64 specified the allocation of resources in the Cannabis Tax Fund, which are continuously appropriated. Pursuant to Proposition 64, expenditures are prioritized for regulatory and administrative workload necessary to implement, administer, and enforce the Cannabis Act, followed by research and activities related to the legalization of cannabis and the past effects of its criminalization. Once these priorities have been met, the remaining funds are allocated to youth education, prevention, early intervention, and treatment; environmental protection; and public safety-related activities. The Budget estimates \$296.9 million will be available for these purposes in 2020-21, and the structure of these allocations is unchanged from 2019-20:

- Education, prevention, and treatment of youth substance use disorders and school retention—60 percent (\$178.1 million).
- Clean-up, remediation, and enforcement of environmental impacts created by illegal cannabis cultivation—20 percent (\$59.4 million).
- Public safety-related activities—20 percent (\$59.4 million).

These figures reflect an increase of \$86.1 million compared to the 2019-20 allocations.

DEPARTMENT OF CONSUMER AFFAIRS – VARIOUS FEE INCREASES

The Department of Consumer Affairs proposed fee increases at May Revision for four boards and one bureau via statutory changes with an effective date of January 1, 2021. Although fee increases for Boards and Bureaus have recently been handled by the policy committees of the Legislature, given the effects of the COVID-19 pandemic on legislative processes and the uncertainty of when these issues could be addressed, it was necessary to propose these fee increases in the May Revision to allow timely implementation of the fees.

The programs included in this proposal are: the Board of Behavioral Sciences, the Board of Podiatric Medicine, the Bureau for Private Postsecondary Education, the California Acupuncture Board, and the Medical Board of California. The fund balances for these programs have been in decline; however, the need for fee augmentations has accelerated with recent increases in the costs of government, most of which are outside of the individual programs' control. These programs are all at or near their current statutory fee limits and require a legislative change to amend their existing fees. Each program has completed, or is in the process of completing, a contracted fee study to support their respective fee augmentation requests.

The Legislature has deferred action on these fee increases to allow more discussion to take place over the coming weeks. Without a statutory fee change effective January 1, 2021, these programs will risk financial insolvency.

The Legislature also deferred proposed fee increases that are needed to support various legislative requirements enacted in 2018 and 2019 related to the Controlled Substance Utilization Review and Evaluation System, also known as CURES. Absent a fee increase, statutory relief from requirements of the recent CURES legislation will be necessary, which may endanger public health and safety, particularly as it relates to the opioid crisis. The Administration will continue to pursue this necessary fee increase.

CALIFORNIA CONSUMER FINANCIAL PROTECTION

The Department of Business Oversight (DBO) regulates financial services and state-licensed financial institutions, including banks, credit unions, money transmitters, securities brokers and dealers, investment advisers, payday lenders, mortgage lenders, escrow agents, student loan servicers, and other commercial and consumer lenders.

The California Consumer Financial Protection Law proposal seeks to cement California's consumer protection leadership amidst a growing financial crisis and the consumer-protection retreat by federal agencies, including the Consumer Financial Protection Bureau. The fragmented oversight of financial services has left consumers vulnerable to abuse.

These problems are further exacerbated in times of crisis, including the COVID-19 pandemic and related economic fallout. Financially distressed consumers—especially communities of color, immigrant communities, and the elderly—will be targets of predatory financial products and practices. Those practices will emerge and evolve to avoid existing regulatory frameworks, requiring alert oversight and agile enforcement.

This law would expand DBO's ability to provide greater consumer protection and memorialize that intent by renaming the DBO as the Department of Financial Protection and Innovation. Additionally, this proposal:

- Creates a new Division of Consumer Financial Protection, and a related California Consumer Financial Protection Law, to expand oversight over current and emerging abusive acts and practices that cause consumers financial harm, and promote consumer-focused research and outreach.
- Establishes an Office of Financial Technology Innovation to study emerging technologies in financial services, including virtual currencies, and to engage with California companies developing new financial products and services.

The Budget includes \$10.2 million in 2020-21, growing to \$19.3 million ongoing in 2022-23, in a set-aside item for these purposes. However, expenditure of these funds is contingent upon enactment of statutory changes that authorize the California Consumer Financial Protection Law program. The Administration and Legislature will work together over the next several weeks to finalize the statutory framework needed to implement the program and other changes that aim to improve consumer protection for all Californians.

CALIFORNIA VOLUNTEERS

As the State Service Commission for California, California Volunteers manages programs and initiatives aimed at increasing the number of Californians engaged in service and volunteering. This includes a lead role in coordinating volunteer and donation management during the COVID-19 pandemic response and recovery. The state's response to the COVID-19 pandemic has highlighted the need to build up and support these activities.

The Budget provides \$2.9 million ongoing General Fund for administrative and strategic planning staff, including emergency volunteer coordinators that will be located in the three most populated regions of the state. This infrastructure will build the state's capacity to respond to the COVID-19 pandemic, as well as future emergencies, by increasing opportunities for Californians to serve their communities in a time of need.

The Budget also provides \$10.1 million ongoing General Fund to sustain nearly 500 AmeriCorps volunteer positions that were established with funding from the 2019 Budget Act. AmeriCorps volunteers serve statewide in programs that address critical community needs in education, public safety, health and human services, and the environment. Many of these programs provide services to underserved communities, such as low-income Californians, people of color and those transitioning out of foster care. AmeriCorps members also are participating in COVID-19 response and recovery by volunteering in food banks, assisting with meal deliveries to seniors, and meeting a variety of other COVID-19 related community needs as they arise.

SECRETARY OF STATE

Executive Order N-64-20, issued May 2020, required each county elections official to send vote-by-mail ballots for the November 3, 2020 General Election to all registered voters so that Californians can exercise their right to vote in a safe and accessible manner. Chapter 4, Statutes of 2020 (AB 860) codified the provisions of Executive Order N-64-20 and related election requirements for the November 3, 2020 statewide general election. In addition, Executive Order N-67-20, issued June 2020, authorizes certain counties to provide three days of early voting starting the Saturday before election day, and provides for earlier availability of ballot drop-box locations while also allowing certain counties to consolidate voting locations.

Recognizing that the COVID-19 pandemic will impact the ability of California to carry out the November 2020 General Election, the Budget includes a total of \$111.6 million

(\$46.1 million General Fund and \$65.5 million Federal Funds) to prevent, prepare for, and respond to the impacts of COVID-19 on the election and provide associated voter education and outreach. This funding includes \$35 million in new General Fund, \$11.1 million in unspent General Fund provided for state voting system replacement in the 2018 and 2019 Budget Acts, and Help America Vote Act (HAVA) funds included in the CARES Act (\$36.5 million) and the Consolidated Appropriations Act of 2020 (\$29 million). Counties will not be required to provide a match to use the remaining funding from the state's voting system allocations provided in the 2018 and 2019 Budget Acts if used for COVID-19 related costs while carrying out the November 2020 General Election.

CALIFORNIA DEPARTMENT OF VETERANS AFFAIRS

The California Department of Veterans Affairs (CalVet) works to serve the nearly 1.6 million veterans and their families living in California. CalVet strives to ensure that veterans of every era and their families receive state and federal benefits and services they have earned as a result of honorable military service. CalVet operates eight homes throughout the state that provide residential and medical care services to aged or disabled California veterans who served on active duty.

ELECTRONIC HEALTHCARE RECORD SYSTEM

The Budget includes one-time funding of \$1.2 million General Fund to begin implementation of a new information technology project for a single electronic healthcare record system to replace multiple legacy systems. The system will streamline data entry and will provide a centralized repository for the health records to modernize CalVet's medical record keeping.

MASTER PLAN

In January 2020, CalVet released its statutorily required Master Plan for the overall operation of the veterans homes. The Master Plan examines veteran population trends in California, the potential location of future facilities and alternate service delivery models, and includes several recommendations, some of which are reflected in the Budget as follows:

- **Realigning Levels of Care**—The Budget includes a plan to begin realigning levels of care by adjusting domiciliary populations at Chula Vista and Yountville and

converting current Intermediate Care Facilities to Residential Care Facilities at Yountville. For example, CalVet maintains a waitlist with nearly 85 percent of applicants seeking skilled nursing or memory care, while independent living and intermediate care units are underutilized. Residents needing intermediate care will be placed in either Residential Care or Skilled Nursing Facilities based on the severity of their treatment needs. This will provide a continuum of care for residents of the veterans homes. Current residents will not be displaced and realigning levels of care will be achieved over time.

- **Mental Health Services for Veterans**—The Budget includes \$1.1 million General Fund in 2020-21 and \$2.1 million ongoing to improve behavioral health services at the veterans homes by standardizing mental health support staffing.

OTHER SIGNIFICANT ADJUSTMENTS

- **Department of General Services, Capitol Annex Projects**—A transfer of \$694.2 million from the State Project Infrastructure Fund (SPIF) to the General Fund. These funds were previously earmarked for the design and construction of a series of projects necessary for the renovation or reconstruction of the Capitol Annex. Funding in the amount of \$60 million SPIF remains available for pre-construction activities for the projects, and for modifications of the west wing in order to facilitate a fully functioning State Capitol. The remaining costs associated with the design and construction phases of the Annex Projects will be shifted to lease-revenue bond financing.

VETO MESSAGE

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Gavin Newsom
Governor

June 29, 2020

State of California
Governor's Office

I object to the following appropriation contained in Senate Bill 74.

Item 6440-495—Reversion, University of California. I delete this item.

I am deleting this item to conform to the Legislature's intent.

With the above deletion, I hereby approve Senate Bill 74.

A handwritten signature in blue ink, appearing to read 'Gavin Newsom', is centered on the page. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

GAVIN NEWSOM

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BUDGET PROGRAM AREAS

Budget Planning and Preparation,
Cash Management, FISCAL Project Support,
Statewide Budget Issues, and
Statewide Accounting Policies and Training

Corrections and Rehabilitation,
Justice, and General Government

Education

Employee Compensation and
State Pension, Audits and Evaluations,
Departmental Administration and
Information Services, and Information
Technology and Consulting

Energy, Housing and Homelessness,
Labor, Local Government, Tax Agencies,
and Transportation

Health and Human Services

Natural Resources, Environment,
and Capital Outlay

Revenue Forecasting,
Economic Projections, and
Demographic Data

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EXHIBIT "7"



State of California—Health and Human
Services Agency
**California Department of
Public Health**



August 3, 2020

TO: All Californians

SUBJECT: COVID-19 and Reopening In-Person Learning Elementary Education Waiver Process

Overview

California schools have been closed for in-person instruction since mid-March 2020 due to the COVID-19 pandemic. School closures to in-person instruction were part of a broader set of recommendations intended to reduce transmission of SARS-CoV-2, the virus that causes COVID-19. The California Department of Public Health (CDPH) developed the *COVID-19 and Reopening In-Person Learning Framework* (PDF) to support school communities as they decide when and how to implement in-person instruction for the 2020-21 school year.

This framework permitted schools and school districts to reopen for in-person instruction at any time if they are located in a local health jurisdiction (LHJ) that has not been on the county monitoring list within the prior 14 days. If the LHJ has been on the monitoring list within the last 14 days, the school must conduct distance learning only, until their LHJ has been off the monitoring list for at least 14 days.

The framework authorized local health officers (LHO) to grant a waiver of this criteria, in order for elementary schools to open for in-person instruction under specified conditions. Applicants must satisfy all waiver requirements in order to be granted a waiver. Waivers should be granted or denied pursuant to the process outlined below.

Waiver Process

- **CDPH recommends that schools within jurisdictions with 14-day case rates more than two times the threshold to be on the County Monitoring List (>200 cases/100,000 population) should not be considered for a waiver to re-open in-person instruction.**
- Closed elementary schools in counties on the monitoring list within the prior 14 days may not open for in-person instruction until they have received approval of a waiver submitted to the LHO.
- This elementary school waiver is applicable only for grades TK-6, even if the grade configuration at the school includes additional grades.
- A district superintendent, private school principal/head of school, or executive director of a charter school (hereinafter applicant) can apply for a waiver from the LHO to open an elementary school for in-person instruction.
- Applications and all supporting documents must be submitted to the LHO at least 14 days prior to the desired reopening date.
- Prior to applying for the waiver, the applicant (or his/her staff) must (1) consult with labor, parent, and community organizations, and (2) publish elementary school reopening plans on the website of the local

- educational agency (or equivalent). Examples of community organizations include school-based non-profit organizations and local organizations that support student enrichment, recreation, after-school programs, health services, early childhood services or provide family support.
- As described in the *CDPH/CalOSHA Guidance for Schools and School-Based Programs* (PDF), elementary school reopening plans must address several topics related to health and safety, in a manner consistent with guidance from CDPH and the local health department. Those topics include:
 - Cleaning and disinfection
 - Small, stable, cohorting
 - Entrance, egress, and movement within the school
 - Face coverings and other essential protective gear
 - Health screenings for students and staff
 - Healthy hygiene practices
 - Identification and tracing of contacts
 - Physical distancing
 - Staff training and family education
 - Testing of students and staff
 - Triggers for switching to distance learning
 - Communication plans
 - When applying for the waiver, the applicant must submit to the LHO a waiver application form, to be provided by the LHO. The application must include evidence of (1) consultation with labor, parent, and community organizations and (2) publication of the elementary school reopening plans on the website of the local educational agency (or equivalent).
 - The applicant must sign an attestation confirming the names and dates that the organizations were consulted. If school staff are not represented by a labor organization, then the applicant must describe the process by which it consulted with school staff.
 - The applicant must confirm publication of the elementary school reopening plans on the website of the local educational agency (or equivalent).
 - If applying on behalf of a school district, the applicant should submit a consolidated application and publish a plan for elementary schools in the district that are seeking to reopen for in-person instruction. If applying for an independent, private, faith-based, or charter school, the applicant should submit an application and publish a plan for each school.
 - Upon receipt of a waiver application, the LHO will review and consider the application, supporting materials, and the following:
 - Available scientific evidence regarding COVID-related risks in schools serving elementary-age students, along with the health-related risks for children who are not provided in-person instruction.
 - State law directing public schools to "offer in-person instruction to the greatest extent possible." (Ed. Code § 43504).
 - Whether elementary in-person instruction can be provided in small, stable cohorts.
 - Local health guidance, safety plans, availability of appropriate PPE, and availability of public health and school resources for COVID-19 investigation and response.
 - Current new case rate, testing % positivity trends, and the number and degree of indicators above thresholds to be on the County Monitoring List.
 - Local hospitalization trends and hospital capacity.
 - Any other local conditions or data contributing to inclusion on the County Monitoring List.
 - Availability of testing resources within the community and via employee health plans.
 - The extent to which the applicant has consulted with staff, labor organizations, community, and parent organizations.
 - Following review, the LHO will consult with CDPH regarding the determination whether to grant or deny the waiver application. Consultation with CDPH is accomplished by submitting a notice pursuant to CDPH instructions.
 - CDPH will acknowledge receipt of the notice and follow up if there are any questions or concerns. CDPH will provide technical assistance as requested.

- If the LHO has not received a further response within three business days of submission, the waiver application may be approved or denied consistent with CDPH instructions.
- LHOs may conditionally grant an application with limits on the number of elementary schools allowed to re-open or allow re-opening in phases to monitor for any impact on the community.
- Closed elementary schools in counties on the monitoring list within the prior 14 days may not open for in-person instruction until they have received approval of a waiver submitted to the LHO.

California Department of Public Health
PO Box, 997377, MS 0500, Sacramento, CA 95899-7377
Department Website (cdph.ca.gov)



Page Last Updated : August 4, 2020

EXHIBIT "8"

EDUCATION

Report reveals disparities among Black, Latino LAUSD students in online learning amid COVID-19 pandemic

A new LAUSD report shows more than 50,000 of its Black and Latino middle and high school students didn't regularly participate in online instruction after campuses closed in March.

Friday, July 17, 2020

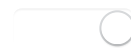
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MORE VIDEOS

A new LAUSD report shows more than 50,000 of its Black and Latino middle and high school students didn't regularly participate in online instruction after campuses closed in March.

LOS ANGELES (KABC) -- More than 50,000 Black and Latino middle and high school students in Los Angeles did not regularly participate in the school system's main platform for virtual classrooms after campuses closed in March, reflecting the disparities faced by

students of color amid the COVID-19 pandemic and the difficulties ahead as the LAUSD prepares for continued online learning, according to a new report.

The numbers, reflected in a first-of-its-kind report by Los Angeles Unified School District analysts examining student engagement during campus closures, paint a stark picture of students in the nation's second largest school district struggling under the new pressures of online learning, the Los Angeles Times reported.

Nearly every category of students -- sorted by race, income and learning needs -- included large numbers who did not regularly participate in distance learning. But low-income students and Black and Latino students showed participation rates between 10 and 20 percentage points lower than white and Asian peers, according to study cited by The Times.

RELATED: California State Superintendent Tony Thurmond seeks \$500 million help to close digital divide

English learners, students with disabilities, homeless students and those in the foster-care system had lower rates of online participation, according to The Times.

The engagement report dated July 7, was completed before Superintendent Austin Beutner announced Monday that campuses would remain closed when the new school year begins on Aug. 18. In making the decision, he acknowledged that online learning would be no substitute for the classroom.

The report measured engagement without explaining why certain groups of students were less likely to participate. But previous surveys have shown that many families of color and low-income families at first lacked computers and internet access. L.A. Unified moved to minimize those issues by providing computers and internet hot spots.

At the same time, the coronavirus crisis has taken a uniquely devastating toll on Black and Latino families, whose members disproportionately work as essential front-line workers, frequently in low-paying jobs that have exposed family members to health risks and prevented them from overseeing their children's schoolwork at home.

The achievement gap among Black and Latino students has persisted for decades.

RELATED: Gov. Gavin Newsom announces which California school districts can

reopen in the fall

The LAUSD study examined the period between March 16, the Monday after schools closed, and May 22. It described how students engaged at various levels online. For example, some students simply logged in and did little else. Others only viewed their work. Those whom the report described as "participating" were students who submitted work, took tests, posted on a discussion board or created a message.

Using that measure, the report found that on an average day only about 36% of middle and high school students participated online. About 25% logged on or viewed work only. And about 40% were absent, The Times reported.

Among Latinos, who make up three-quarters of the district's 206,000 middle and high school students, the peak weekly participation rate was 67 percent for middle school students and 73 percent for high school students. For Black students, it was 67 percent and 71 percent.

By comparison, weekly participation among the district's 19,300 white secondary students peaked at 88 percent for middle school students and 85 percent for high school students.

Among Asians, who had the highest participation rates, it was 89 percent and 91 percent. They account for 8,241 students in the analysis.

RELATED: Most CA schools 'shouldn't reopen' if COVID-19 trends continue, state superintendent says

Low-income students, meanwhile, lagged between 10 and 20 percentage points behind their peers from more affluent families. And among English learners, students with disabilities and those who are homeless or in foster care, peak weekly participation was 57 percent or lower.

"These are deeply disturbing, yet not surprising data," UCLA education professor Tyrone Howard, who also directs the Black Male Institute, told The Times. "Unfortunately, what these data remind us is that race, socioeconomic status, disabilities and disadvantage still matters."

City News Service contributed to this report.

EXHIBIT "9"



COVID-19 INDUSTRY GUIDANCE: Schools and School- Based Programs

Updated: **August 3, 2020**

All guidance should be implemented only with local health officer approval following their review of local epidemiological data including cases per 100,000 population, rate of test positivity, and local preparedness to support a health care surge, vulnerable populations, contact tracing, and testing.



OVERVIEW

Communities across the state are preparing for the forthcoming school year. To assist with that planning process, the following guidelines and considerations are intended to help school and community leaders plan and prepare to resume in-person instruction.

This guidance is interim and subject to updates. These guidelines and considerations are based on the best available public health data at this time, international best practices currently employed, and the practical realities of managing school operations; as new data and practices emerge. Additionally, the guidelines and considerations do not reflect the full scope of issues that school communities will need to address, which range from day-to-day site-based logistics to the social and emotional well-being of students and staff.

California public schools (traditional and charter), private schools (including nonpublic nonsectarian schools), school districts, and county offices of education, herein referred to as schools, will determine the most appropriate instructional model, taking into account the needs of their students and staff, and their available infrastructure. This guidance is not intended to prevent a school from adopting a distance learning, hybrid, or mixed-delivery instructional model to ensure safety. Schools are not required to seek out or receive approval from a state or local public health officer prior to adopting a distance-learning model.

Implementation of this guidance will depend on local public health conditions, including those listed [here](#). Communities meeting those criteria, such as lower incidence of COVID-19 and adequate preparedness, may implement the guidance described below as part of a phased reopening. All decisions about following this guidance should be made in collaboration with local health officials and other authorities.

Implementation of this guidance should be tailored for each setting, including adequate consideration of instructional programs operating at each school site and the needs of students and families. School leaders should engage relevant stakeholders—including families, staff and labor partners in the school community—to formulate and implement plans that consider the following:

- **Student, Family and Staff Population:** Who are the student, family and staff populations who will be impacted by or can serve as partners in implementing any of the following measures?
- **Ability to Implement or Adhere to Measures:** Do staff, students and families have the tools, information, resources and ability to successfully adhere to or implement the new measures?
- **Negative or Unintended Consequences:** Are there any negative or unintended consequences to staff, students or families of implementing the measures and how can those consequences be mitigated?

This guidance is not intended to revoke or repeal any worker rights, either statutory, regulatory or collectively bargained, and is not exhaustive, as it does not include county health orders, nor is it a substitute for any existing safety and health-related regulatory requirements such as those of Cal/OSHA. Stay current on changes to public health guidance and state/local orders, as the COVID-19 situation continues.



1. General Measures

- Establish and continue communication with local and State authorities to determine current disease levels and control measures in your community. For example:
 - Review and refer to, if applicable, the relevant county variance documentation. Documentation can be found [here](#).
 - Consult with your county health officer, or designated staff, who are best positioned to monitor and provide advice on local conditions. A directory can be found [here](#).
 - Collaborate with other schools and school partners in your region, including the county office of education.
 - Regularly review updated guidance from state agencies, including the [California Department of Public Health](#) and [California Department of Education](#).
- Establish a written, worksite-specific COVID-19 prevention plan at every facility, perform a comprehensive risk assessment of all work areas and work tasks, and designate a person at each school to implement the plan.
 - Identify contact information for the local health department where the school is located for communicating information about COVID-19 outbreaks among students or staff.
 - Incorporate the [CDPH Guidance](#) for the Use of Face Coverings, into the School Site Specific Plan that includes a policy for handling exemptions.
 - Train and communicate with workers and worker representatives on the plan. Make the written plan available and accessible to workers and worker representatives.
 - Regularly evaluate the workplace for compliance with the plan and document and correct deficiencies identified.
 - Investigate any COVID-19 illness and determine if any work-related factors could have contributed to risk of infection. Update the plan as needed to prevent further cases.
 - Implement the necessary processes and protocols when a workplace has an outbreak, in accordance with [CDPH guidelines](#).
 - Identify individuals who have been in close contact (within six feet for 15 minutes or more) of an infected person and take steps to isolate

COVID-19 positive person(s) and close contacts. See Section 10 for more detail.

- Adhere to these guidelines. Failure to do so could result in workplace illnesses that may cause classrooms or the entire school to be temporarily closed or limited.
- Evaluate whether and to what extent external community organizations can safely utilize the site and campus resources. Ensure external community organizations that use the facilities also follow this guidance.
- Develop a plan for the possibility of repeated closures of classes, groups or entire facilities when persons associated with the facility or in the community become ill with COVID-19. See Section 10 below.
- Develop a plan to further support students with access and functional needs who may be at increased risk of becoming infected or having unrecognized illness due to COVID-19. For example, review existing student health plans to identify students who may need additional accommodations, develop a process for engaging families for potentially unknown concerns that may need to be accommodated or identify additional preparations for classroom and non-classroom environments as needed. Groups who might be at increased risk of becoming infected or having unrecognized illness include the following:
 - Individuals who have limited mobility or require prolonged and close contact with others, such as direct support providers and family members;
 - Individuals who have trouble understanding information or practicing preventive measures, such as hand washing and physical distancing; and
 - Individuals who may not be able to communicate symptoms of illness.
- Schools should review the [CDPH Guidance for the Use of Face Coverings](#) and any applicable local health department guidance and incorporate face-covering use for students and workers into their COVID-19 prevention plan. Some flexibility may be needed for younger children consistent with child development recommendations. See Section 3 for more information.



2. Promote Healthy Hygiene Practices

- Teach and reinforce [washing hands](#), avoiding [contact with one's eyes, nose, and mouth](#), and [covering coughs and sneezes](#) among students and staff.
 - Teach students and remind staff to use tissue to wipe their nose and to cough/sneeze inside a tissue or their elbow.
 - Students and staff should wash their hands frequently throughout the day, including before and after eating; after coughing or sneezing; after classes where they handle shared items, such as outside recreation, art, or shop; and before and after using the restroom.
 - Students and staff should wash their hands for 20 seconds with soap, rubbing thoroughly after application. Soap products marketed as “antimicrobial” are not necessary or recommended.
 - Staff should model and practice handwashing. For example, for lower grade levels, use bathroom time as an opportunity to reinforce healthy habits and monitor proper handwashing.
 - Students and staff should use fragrance-free hand sanitizer when handwashing is not practicable. Sanitizer must be rubbed into hands until completely dry. Note: frequent handwashing is more effective than the use of hand sanitizers.
 - Ethyl alcohol-based hand sanitizers are preferred and should be used when there is the potential of unsupervised use by children.
 - Isopropyl hand sanitizers are more toxic when ingested or absorbed in skin.
 - Do not use hand sanitizers that may [contain methanol](#) which can be hazardous when ingested or absorbed.
 - Children under age 9 should only use hand sanitizer under adult supervision. Call Poison Control if consumed: 1-800-222-1222.
- Consider portable handwashing stations throughout a site and near classrooms to minimize movement and congregations in bathrooms to the extent practicable.
- Develop routines enabling students and staff to regularly wash their hands at staggered intervals.
- Ensure adequate supplies to support healthy hygiene behaviors, including soap, tissues, no-touch trashcans, face coverings, and hand sanitizers with at least 60 percent ethyl alcohol for staff and children who can safely use hand sanitizer.

- Information contained in the [CDPH Guidance](#) for the Use of Face Coverings should be provided to staff and families, which discusses the circumstances in which face coverings must be worn and the exemptions, as well as any policies, work rules, and practices the employer has adopted to ensure the use of face coverings.
- Employers must provide and ensure staff use face coverings in accordance with CDPH guidelines and all required protective equipment.
- The California Governor's Office of Emergency Services (CalOES) and the Department of Public Health (CDPH) are and will be working to support procurement and distribution of face coverings and personal protective equipment. Additional information can be found [here](#).
- Strongly recommend that all students and staff be immunized each autumn against influenza unless contraindicated by personal medical conditions, to help:
 - Protect the school community
 - Reduce demands on health care facilities
 - Decrease illnesses that cannot be readily distinguished from COVID-19 and would therefore trigger extensive measures from the school and public health authorities.
- Nothing in this guidance should be interpreted as restricting access to appropriate educational services.



3. Face Coverings

Face coverings must be used in accordance with [CDPH guidelines](#) unless a person is exempt as explained in the guidelines, particularly in indoor environments, on school buses, and areas where physical distancing alone is not sufficient to prevent disease transmission.

- Teach and reinforce use of [face coverings](#), or in limited instances, face shields.
- Students and staff should be frequently reminded not to touch the face covering and to [wash their hands](#) frequently.
- Information should be provided to all staff and families in the school community on [proper use, removal, and washing of cloth face coverings](#).
- Training should also include policies on how people who are exempted from wearing a face covering will be addressed.

STUDENTS

| Age | Face Covering Requirement |
|-------------------------------------|---------------------------|
| Under 2 years old | No |
| 2 years old – 2 nd grade | Strongly encouraged** |
| 3 rd grade – High School | Yes, unless exempt |

**Face coverings are strongly encouraged for young children between two years old and second grade, if they can be worn properly. A face shield is an acceptable alternative for children in this cohort who cannot wear them properly.

- Persons younger than two years old, anyone who has trouble breathing, anyone who is unconscious or incapacitated, and anyone who is otherwise unable to remove the face covering without assistance are exempt from wearing a face covering.
- A cloth face covering or face shield should be removed for meals, snacks, naptime, or outdoor recreation, or when it needs to be replaced. When a cloth face covering is temporarily removed, it should be placed in a clean paper bag (marked with the student's name and date) until it needs to be put on again.
- In order to comply with this guidance, schools must exclude students from campus if they are not exempt from wearing a face covering under CDPH guidelines and refuse to wear one provided by the school. Schools should develop protocols to provide a face covering to students who inadvertently fail to bring a face covering to school to prevent unnecessary exclusions. Schools should offer alternative educational opportunities for students who are excluded from campus.

STAFF

- All staff must use face coverings in accordance with [CDPH guidelines](#) unless Cal/OSHA standards require respiratory protection.
- In limited situations where a face coverings cannot be used for pedagogical or developmental reasons, (i.e. communicating or assisting young children or those with special needs) a face shield can be used instead of a cloth face covering while in the classroom as long as the wearer maintains physical distance from others, to the extent practicable. Staff must return to wearing a face covering outside of the classroom.

- Workers or other persons handling or serving food must use gloves in addition to face coverings. Employers should consider where disposable glove use may be helpful to supplement frequent handwashing or use of hand sanitizer; examples are for workers who are screening others for symptoms or handling commonly touched items.



4. Ensure Teacher and Staff Safety

- Ensuring staff maintain physical distancing from each other is critical to reducing transmission between adults.
- Ensure that all staff use face coverings in accordance with CDPH guidelines and Cal/OSHA standards.
- Support staff who are at higher risk for severe illness or who cannot safely distance from household contacts at higher risk, by providing options such as telework, where appropriate, or teaching in a virtual learning or independent study context.
- Conduct all staff meetings, professional development training and education, and other activities involving staff with physical distancing measures in place, or virtually, where physical distancing is a challenge.
- Minimize the use of and congregation of adults in staff rooms, break rooms, and other settings.
- Implement procedures for daily symptom monitoring for staff.



5. Intensify Cleaning, Disinfection, and Ventilation

- Consider suspending or modifying use of site resources that necessitate sharing or touching items. For example, consider suspending use of drinking fountains and instead encourage the use of reusable water bottles.
- Staff should [clean and disinfect](#) frequently-touched surfaces at school and on school buses at least daily and, as practicable, these surfaces should be cleaned and disinfected frequently throughout the day by trained custodial staff.
- Buses should be thoroughly cleaned and disinfected daily and after transporting any individual who is exhibiting symptoms of COVID-19. Drivers should be provided disinfectant wipes and disposable gloves to support disinfection of frequently touched surfaces during the day.

- Frequently touched surfaces in the school include, but are not limited to:
 - Door handles
 - Light switches
 - Sink handles
 - Bathroom surfaces
 - Tables
 - Student Desks
 - Chairs
- Limit use and sharing of objects and equipment, such as toys, games, art supplies and playground equipment to the extent practicable. When shared use is allowed, clean and disinfect between uses.
- When choosing disinfecting products, use those approved for use against COVID-19 on the [Environmental Protection Agency \(EPA\)-approved list "N"](#) and follow product instructions.
 - To [reduce the risk of asthma](#) and other health effects related to disinfecting, programs should select disinfectant products on list N with asthma-safer ingredients (hydrogen peroxide, citric acid or lactic acid) as recommended by the US EPA Design for Environment program.
 - Avoid products that contain peroxyacetic (peracetic) acid, sodium hypochlorite (bleach) or quaternary ammonium compounds, which can cause asthma.
 - Follow label directions for appropriate dilution rates and contact times. Provide workers training on the chemical hazards, manufacturer's directions, Cal/OSHA requirements for safe use, and as applicable and as required by the Healthy Schools Act.
 - Custodial staff and any other workers who clean and disinfect the school site must be equipped with proper protective equipment, including gloves, eye protection, respiratory protection, and other appropriate protective equipment as required by the product instructions. All products must be kept out of children's reach and stored in a space with restricted access.
 - Establish a cleaning and disinfecting schedule in order to avoid both under- and over-use of cleaning products.
- Ensure safe and correct application of disinfectant and keep products away from students.

- Ensure proper ventilation during cleaning and disinfecting. Introduce fresh outdoor air as much as possible, for example, by opening windows where practicable. When cleaning, air out the space before children arrive; plan to do thorough cleaning when children are not present. If using air conditioning, use the setting that brings in outside air. Replace and check air filters and filtration systems to ensure optimal air quality.
 - If opening windows poses a safety or health risk (e.g., by allowing pollen in or exacerbating asthma symptoms) to persons using the facility, consider alternatives. For example, maximize central air filtration for HVAC systems (targeted filter rating of at least MERV 13).
- Consider installing portable high-efficiency air cleaners, upgrading the building's air filters to the highest efficiency possible, and making other modifications to increase the quantity of outside air and ventilation in classrooms, offices and other spaces.
- [Take steps](#) to ensure that all water systems and features (for example, drinking fountains and decorative fountains) are safe to use after a prolonged facility shutdown to minimize the risk of [Legionnaires' disease](#) and other diseases associated with water.



6. Implementing Distancing Inside and Outside the Classroom



Arrival and Departure

- Maximize space between students and between students and the driver on school buses and open windows to the greatest extent practicable.
- Minimize contact at school between students, staff, families and the community at the beginning and end of the school day. Prioritize minimizing contact between adults at all times.
- Stagger arrival and drop off-times and locations as consistently as practicable as to minimize scheduling challenges for families.
- Designate routes for entry and exit, using as many entrances as feasible. Put in place other protocols to limit direct contact with others as much as practicable.
- Implement health screenings of students and staff upon arrival at school (see Section 9).
- Ensure each bus is equipped with extra unused face coverings on school buses for students who may have inadvertently failed to bring one.



Classroom Space

- To reduce possibilities for infection, students must remain in the same space and in cohorts as small and consistent as practicable, including for recess and lunch. Keep the same students and teacher or staff with each group, to the greatest extent practicable.
- Prioritize the use and maximization of outdoor space for activities where practicable.
- Minimize movement of students and teachers or staff as much as practicable. For example, consider ways to keep teachers with one group of students for the whole day. In secondary schools or in situations where students have individualized schedules, plan for ways to reduce mixing among cohorts and to minimize contact.
- Maximize space between seating and desks. Distance teacher and other staff desks at least six feet away from student desks. Consider ways to establish separation of students through other means if practicable, such as, six feet between desks, where practicable, partitions between desks, markings on classroom floors to promote distancing or arranging desks in a way that minimizes face-to-face contact.
- Consider redesigning activities for smaller groups and rearranging furniture and play spaces to maintain separation.
- Staff should develop instructions for maximizing spacing and ways to minimize movement in both indoor and outdoor spaces that are easy for students to understand and are developmentally appropriate.
- Activities where there is increased likelihood for transmission from contaminated exhaled droplets such as band and choir practice and performances are not permitted.
- Activities that involve singing must only take place outdoors.
- Implement procedures for turning in assignments to minimize contact.
- Consider using privacy boards or clear screens to increase and enforce separation between staff and students.



Non-Classroom Spaces

- Limit nonessential visitors, volunteers and activities involving other groups at the same time.
- Limit communal activities where practicable. Alternatively, stagger use, properly space occupants and disinfect in between uses.
- Consider use of non-classroom space for instruction, including regular use of outdoor space, weather permitting. For example, consider part-day instruction outside.
- Minimize congregate movement through hallways as much as practicable. For example, establish more ways to enter and exit a campus, create staggered passing times when necessary or when students cannot stay in one room and create guidelines on the floor that students can follow to enable physical distancing while passing. In addition, schools can consider eliminating the use of lockers and moving to block scheduling, which supports the creation of cohort groups and reduces changes of classrooms.
- Serve meals outdoors or in classrooms instead of cafeterias or group dining rooms where practicable. Where cafeterias or group dining rooms must be used, keep students together in their cohort groups, ensure physical distancing, and consider assigned seating. Serve individually plated or bagged meals. Avoid sharing of foods and utensils and buffet or family-style meals.
- Consider holding recess activities in separated areas designated by class.



Sports and Extra Curricular Activities (Updated August 3, 2020)

- Outdoor and indoor sporting events, assemblies, dances, rallies, field trips, and other activities that require close contact or that would promote congregating are not permitted at this time. For example, tournaments, events, or competitions, regardless of whether teams are from the same school or from different schools, counties, or states are not permitted at this time.
- Youth sports and physical education are permitted only when the following can be maintained: (1) physical distancing of at least six feet; and (2) a stable cohort, such as a class, that limits the risks of transmission (see [CDC Guidance on Schools and Cohorting](#)). Activities should take place outside to the maximum extent practicable.

- For sports that cannot be conducted with sufficient distancing or cohorting, only physical conditioning and training is permitted and ONLY where physical distancing can be maintained. Conditioning and training should focus on individual skill building (e.g., running drills and body weight resistance training) and should take place outside, where practicable. Indoor physical conditioning and training is allowed only in counties where gyms and fitness centers are allowed to operate indoors.
- Avoid equipment sharing, and if unavoidable, clean and disinfect shared equipment between use by different people to reduce the risk of COVID-19 spread.
- Consistent with guidance for gyms and fitness facilities, cloth face coverings must be worn during indoor physical conditioning and training or physical education classes (except when showering). Activities that require heavy exertion should be conducted outside in a physically distanced manner without face coverings. Activities conducted inside should be those that do not require heavy exertion and can be done with a face covering. Players should take a break from exercise if any difficulty in breathing is noted and should change their mask or face covering if it becomes wet and sticks to the player's face and obstructs breathing. Masks that restrict airflow under heavy exertion (such as N-95 masks) are not advised for exercise.
- Youth sports programs and schools should provide information to parents or guardians regarding this and related guidance, along with the safety measures that will be in place in these settings with which parents or guardians must comply.
- Activities where there is increased likelihood for transmission from contaminated exhaled droplets such as band and choir practice and performances are not permitted.



7. Limit Sharing

- Keep each child's belongings separated and in individually labeled storage containers, cubbies or areas. Ensure belongings are taken home each day to be cleaned.
- Ensure adequate supplies to minimize sharing of high-touch materials (art supplies, equipment, etc.) to the extent practicable or limit use of supplies and equipment to one group of children at a time and clean and disinfect between uses.
- Avoid sharing electronic devices, clothing, toys, books and other games or learning aids as much as practicable. Where sharing occurs, clean and disinfect between uses.



8. Train All Staff and Educate Families

- Train all staff and provide educational materials to families in the following safety actions:
 - Enhanced sanitation practices
 - Physical distancing guidelines and their importance
 - [Proper use, removal, and washing of face coverings](#)
 - Screening practices
 - How COVID-19 is spread
 - COVID-19 specific [symptom](#) identification
 - Preventing the spread of COVID-19 if you are sick, including the importance of not coming to work if staff members have symptoms, or if they or someone they live with has been diagnosed with COVID-19.
 - For workers, COVID-19 specific [symptom](#) identification and when to seek medical attention
 - The employer's plan and procedures to follow when children or adults become sick at school.
 - The employer's plan and procedures to protect workers from COVID-19 illness.
- Consider conducting the training and education virtually, or, if in-person, ensure a minimum of six-foot distancing is maintained.



9. Check for Signs and Symptoms

- Prevent discrimination against students who (or whose families) were or are diagnosed with COVID-19 or who are perceived to be a COVID-19 risk.
- Actively encourage staff and students who are sick or who have recently had [close contact](#) with a person with COVID-19 to stay home. Develop policies that encourage sick staff and students to stay at home without fear of reprisal, and ensure staff, students and students' families are aware of these policies.
- Implement screening and other procedures for all staff and students entering the facility.

- Conduct visual wellness checks of all students or establish procedures for parents to monitor at home. If checking temperatures, use a no-touch thermometer.
- Ask all individuals if they or anyone in their home is exhibiting [COVID-19 symptoms](#).
- Make available and encourage use of hand-washing stations or hand sanitizer.
- Document/track incidents of possible exposure and notify local health officials, staff and families immediately of any exposure to a positive case of COVID-19 at school while maintaining confidentiality, as required under FERPA and state law related to privacy of educational records. Additional guidance can be found [here](#). As noted in Section 11 below, the staff liaison can serve a coordinating role to ensure prompt and responsible notification.
- If a student is exhibiting symptoms of COVID-19, staff should communicate with the parent/caregiver and refer to the student's health history form and/or emergency card.
- Monitor staff and students throughout the day for signs of illness; send home students and staff with a fever of 100.4 degrees or higher, cough or other [COVID-19 symptoms](#).
- Policies should not penalize students and families for missing class.



10. Plan for When a Staff Member, Child or Visitor Becomes Sick

- Work with school administrators, nurses and other healthcare providers to identify an isolation room or area to separate anyone who exhibits symptoms of COVID-19.
- Any students or staff exhibiting symptoms should immediately be required to wear a face covering and be required to wait in an isolation area until they can be transported home or to a healthcare facility, as soon as practicable.
- Establish procedures to arrange for safe transport home or to a healthcare facility, as appropriate, when an individual is exhibiting COVID-19 symptoms:
 - Fever
 - Cough
 - Shortness of breath or difficulty breathing

- Chills
 - Repeated shaking with chills
 - Fatigue
 - Muscle pain
 - Headache
 - Sore throat
 - Congestion or runny nose
 - Nausea or vomiting
 - Diarrhea
 - New loss of taste or smell
- For serious injury or illness, call 9-1-1 without delay. Seek medical attention if COVID-19 symptoms become severe, including persistent pain or pressure in the chest, confusion, or bluish lips or face. Updates and further details are available on [CDC's webpage](#).
 - Notify local health officials immediately of any positive case of COVID-19, and exposed staff and families as relevant while maintaining confidentiality as required by state and federal laws. Additional guidance can be found [here](#).
 - Close off areas used by any individual suspected of being infected with the virus that causes COVID-19 and do not use before cleaning and disinfection. To reduce risk of exposure, wait 24 hours before you [clean and disinfect](#). If it is not possible to wait 24 hours, wait as long as practicable. Ensure a [safe and correct application](#) of disinfectants using personal protective equipment and ventilation recommended for cleaning. Keep disinfectant products away from students.
 - Advise sick staff members and students not to return until they have met CDC criteria to discontinue [home isolation](#), including at least 3 days with no fever, symptoms have improved and at least 10 days since symptoms first appeared.
 - Ensure that students, including students with disabilities, have access to instruction when out of class, as required by federal and state law.
 - Schools should offer distance learning based on the unique circumstances of each student who would be put at-risk by an in-person instructional model. For example, students with a health condition, students with family members with a health condition, students who cohabitate or regularly interact with high-risk individuals, or are otherwise identified as “at-risk” by the parents or guardian, are students whose circumstances merit offering distance learning.

- Implement the necessary processes and protocols when a school has an outbreak, in accordance with [CDPH guidelines](#).
- Investigate the COVID-19 illness and exposures and determine if any work-related factors could have contributed to risk of infection. Update protocols as needed to prevent further cases.
- Update protocols as needed to prevent further cases. See the CDPH guidelines, [Responding to COVID-19 in the Workplace](#), which are incorporated into this guidance and contain detailed recommendations for establishing a plan to identify cases, communicating with workers and other exposed persons, and conducting and assisting with contact tracing.



11. Maintain Healthy Operations

- Monitor staff absenteeism and have a roster of trained back-up staff where available.
- Monitor the types of illnesses and symptoms among your students and staff to help isolate them promptly as needed.
- Designate a staff liaison or liaisons to be responsible for responding to COVID-19 concerns. Workers should know who they are and how to contact them. The liaison should be trained to coordinate the documentation and tracking of possible exposure, in order to notify local health officials, staff and families in a prompt and responsible manner.
- Maintain communication systems that allow staff and families to self-report symptoms and receive prompt notifications of exposures and closures, while maintaining confidentiality, as required by FERPA and state law related to privacy of educational records. Additional guidance can be found [here](#).
- Consult with local health departments if routine testing is being considered by a local educational agency. The role of providing routine systematic testing of staff or students for COVID-19 (e.g., PCR swab testing for acute infection, or presence of antibodies in serum after infection) is currently unclear.
- Support students who are at higher risk for severe illness or who cannot safely distance from household contacts at higher risk, by providing options such as virtual learning or independent study.



12. Considerations for Reopening and Partial or Total Closures

California schools have been closed for in-person instruction since mid-March 2020 due to the COVID-19 pandemic. School closures to in-person instruction were part of a broader set of recommendations intended to reduce transmission of SARS-CoV-2, the virus that causes COVID-19. For more detailed direction on measures to be taken when a student, teacher, or staff member has symptoms or is diagnosed with COVID-19, please see the [COVID-19 and Reopening Framework for K-12 Schools in California](#).

- Check State and local orders and health department notices daily about transmission in the area or closures and adjust operations accordingly.
- When a student, teacher or staff member tests positive for COVID-19 and had exposed others at the school, refer to the [CDPH Framework for K-12 Schools](#), and implement the following steps:
 - In consultation with the local public health department, the appropriate school official should ensure cleaning and quarantine of exposed persons and whether any additional intervention is warranted, including the length of time necessary, based on the risk level within the specific community as determined by the local public health officer.
 - Close off the classroom or office where the patient was based and do not use these areas until after cleaning and disinfection. Wait at least 24 hours before cleaning and disinfecting. If 24 hours is not feasible, wait for at least two hours and as long as possible.
 - Additional areas of the school visited by the COVID-19 positive individual may also need to be cleaned and disinfected.
 - Implement communication plans for exposure at school and potential school closures to include outreach to students, parents, teachers, staff and the community.
 - Include information for staff regarding labor laws, information regarding Disability Insurance, Paid Family Leave and Unemployment Insurance, as applicable to schools. See additional [information on government programs supporting sick leave and worker's compensation for COVID-19](#), including worker's sick leave rights under [the Families First Coronavirus Response Act](#) and employee's rights to workers' compensation benefits and presumption of the work-relatedness of COVID-19 pursuant to the [Governor's Executive Order N-62-20](#), while that Order is in effect.
 - Provide guidance to parents, teachers and staff reminding them of

the importance of community physical distancing measures while a school is closed, including discouraging students or staff from gathering elsewhere.

- Develop a plan for continuity of education. Consider in that plan how to also continue nutrition and other services provided in the regular school setting to establish alternate mechanisms for these services to continue.
- Maintain regular communications with the local public health department.



EXHIBIT "10"



Projecting the potential impacts of COVID-19 school closures on academic achievement

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With 55 million students in the United States out of school due to the COVID-19 pandemic, education systems are scrambling to meet the needs of schools and families, including planning how best to approach instruction in the fall given students may be farther behind than in a typical year. Yet, education leaders have little data on how much learning has been impacted by school closures. While the COVID-19 learning interruptions are unprecedented in modern times, existing research on the impacts of missing school (due to absenteeism, regular summer breaks, and school closures) on learning can nonetheless inform projections of potential learning loss due to the pandemic. In this study, we produce a series of projections of COVID-19-related learning loss and its potential effect on test scores in the 2020-21 school year based on (a) estimates from prior literature and (b) analyses of typical summer learning patterns of five million students. Under these projections, students are likely to return in fall 2020 with approximately 63-68% of the learning gains in reading relative to a typical school year and with 37-50% of the learning gains in math. However, we estimate that losing ground during the COVID-19 school closures would not be universal, with the top third of students potentially making gains in reading. Thus, in preparing for fall 2020, educators will likely need to consider ways to support students who are academically behind and further differentiate instruction.

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Projecting the potential impacts of COVID-19 school closures on academic achievement

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Projecting the potential impact of COVID-19 school closures on academic achievement

Abstract

With 55 million students in the United States out of school due to the COVID-19 pandemic, education systems are scrambling to meet the needs of schools and families, including planning how best to approach instruction in the fall given students may be farther behind than in a typical year. Yet, education leaders have little data on how much learning has been impacted by school closures. While the COVID-19 learning interruptions are unprecedented in modern times, existing research on the impacts of missing school (due to absenteeism, regular summer breaks, and school closures) on learning can nonetheless inform projections of potential learning loss due to the pandemic. In this study, we produce a series of projections of COVID-19-related learning loss and its potential effect on test scores in the 2020-21 school year based on (a) estimates from prior literature and (b) analyses of typical summer learning patterns of five million students. Under these projections, students are likely to return in fall 2020 with approximately 63-68% of the learning gains in reading relative to a typical school year and with 37-50% of the learning gains in math. However, we estimate that losing ground during the COVID-19 school closures would not be universal, with the top third of students potentially making gains in reading. Thus, in preparing for fall 2020, educators will likely need to consider ways to support students who are academically behind and further differentiate instruction.

Introduction

Virtually all K-12 students in the United States had face-to-face instruction interrupted during the 2019-20 school year due to the SARS-CoV-2 (COVID-19) pandemic. The majority of school districts are providing some virtual instruction during the last months of the school year (Lake & Dusseault, 2020a). But it remains unclear how effective virtual learning will be, given that most K-12 students and teachers have little experience with online instruction and that large gaps in technology access exist in many parts of the country. Additionally, during the extended school closure, many working parents struggle to educate and care for their children. These unique educational challenges are accompanied by broader shocks to society, including a major economic downturn, job losses, and the tangible health threat that is COVID-19. In short, extended time out of school will almost certainly affect student achievement (likely in a negative way for many), and that impact is hard to estimate given all the unique aspects of COVID-19 on schooling and society.

While many aspects of the pandemic make anticipating its impact on achievement difficult, there are parallels between the current situation and other planned and unplanned reasons for which students miss school that can help us quantify the potential scale of the COVID-19 impact. Specifically, existing research on the effects on learning of (a) summer vacation, (b) weather-related school closures (e.g., Hurricane Katrina in New Orleans), and (c) out-of-school time due to absenteeism can provide a rough sense of how additional time out of school due to COVID-19 will affect achievement in the coming fall and longer term. The intent of our study is to better understand and project how COVID-19-based school closures might affect achievement and growth during the current school year (2019-20) and the next (2020-21). Given that our projections, while based on existing literature, are unable to account for the

impact of virtual instruction, access to supplemental curriculum, or the availability of additional educational resources, among other important factors, we present these results as preliminary estimates of the potential negative impacts expected due to extended school closures.

Prior research on time students spend out of school is useful given the importance of forecasting the impact of COVID-19 on short- and long-term achievement. Teachers and schools can benefit from knowing not only how much lower achievement might be but also how much more variable it could be in the fall. If students begin school in the fall of 2020 (or whenever regular schooling resumes) with bigger gaps in content knowledge between low- and high-performing students, then strategies like expanding instructional differentiation may be warranted. Further, projections of how potential learning loss due to out-of-school time might affect growth in the coming school year may also help educators identify students who are not on track academically when school resumes and give them needed supports.

In this study,¹ we made projections about the effects of COVID-19 on student achievement trends from the spring of 2020, when schools were first shut down across the United States (U.S.), through to the start of the 2020-21 school year. To provide preliminary estimates of the potential impacts of the extended pause on face-to-face academic instruction during the pandemic, we used a national sample of five million students in Grades 3-8 who took MAP® Growth™ assessments in the 2017-18 and 2018-19 school years (e.g., about 22% of the approximately 22 million U.S. public school students in Grades 3-8 according to NCES [2018]). Specifically, we compared typical growth trajectories across a standard-length school year to

¹ This paper has its origins in a NWEA brief (Kuhfeld & Tarasawa, 2020), which presents some preliminary learning projections. The current paper is distinct from the brief in terms of the volume of analyses and theoretical grounding.

learning projections that assume students are out of school for the last three months of the 2019-20 school year. In so doing, we investigated three research questions:

- (1) What are possible scenarios (based on prior literature and recent MAP Growth data) for student learning patterns during the 2019-20 school year as a result of the school closures?
- (2) How much variability do we expect in (a) students' learning rates during the extended school closure period and (b) students' fall 2020 scores assuming a normal 2019-20 school year versus one disrupted by COVID-19?
- (3) What is the association between out-of-school time due to COVID-19 and projected subsequent learning rates over the course of the 2020-21 school year?

Background

While the COVID-19 school closures are unprecedented in the U.S., there are multiple bodies of research on which we can draw to anticipate the impacts² of extended closures on student learning. These include (a) seasonal learning studies that compare learning that occurs during the school year to learning that occurs during summer breaks, (b) studies on weather-related school closures, and (c) studies on student absenteeism. Table 1 provides a summary of the effect sizes (reported in standard deviation [SD] units for each day out of school) from key studies in each body of literature that are discussed below (further details on the studies are provided in Appendix A of the supplemental materials). We then discuss the degrees to which

² Studies from these three lines of research provide descriptive as well as credibly causal evidence. For the purpose of this study, we consider the research evidence collectively without distinguishing causal estimates from associations and refer to all estimated relations between out-of-school time and achievement as effects or impacts.

each of these bodies of work is likely to reflect the conditions observed during the COVID-19 school closures.

Seasonal Learning Studies

Seasonal learning research (including studies to understand the effects of summer learning loss) makes comparisons of student learning patterns when school is in versus out of session. Thus, one way to think about COVID-19 school closures is to consider them extensions of summer break for most students. Research has consistently shown that achievement typically slows or declines over the summer months (on average) and that the declines tend to be steeper for math than for reading (Quinn & Polikoff, 2017). However, there is much debate about the magnitude of summer loss and the degree to which summer vacation contributes to socioeconomic achievement gaps (von Hippel, 2019).

Prominent early work on summer learning loss found that students lost about a month of learning over the summer, with lower-income students falling behind middle- and high-income students in reading (Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996; Alexander, Entwisle, & Olson 2001). Recent summer loss research using the Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K) has indicated minimal loss on average during the summer, while studies using NWEA's MAP Growth assessment showed fairly sizable drops (Atteberry & McEachin; 2020; Kuhfeld, Condrón, & Downey, 2019). This variability in estimates can be seen in Table 1, where summer drop estimates range from 0.001 to 0.010 SDs per day of school missed across grades/subjects. However, research using both recent data sources agree that summer does not appear to be a time in which socioeconomic and racial/ethnic inequalities widen (e.g., von Hippel & Hamrock, 2019; Kuhfeld, 2019; von Hippel, 2019).

School Closures due to Inclement Weather and Natural Disasters

The literature on school closures also provides some insight into the potential effect of COVID-19 school closures, especially given such closures occur unexpectedly and disrupt scheduled instruction. Although they occur over a shorter duration, school closures resulting from inclement weather or natural disasters provide an analog to school closures due to COVID-19. Absent the weather event or natural disaster, schools would be in session and learning for most students would occur as normal. Hansen (2011) found that each day of school cancellation due to snow in Colorado reduced 8th grade math achievement by magnitudes ranging from 0.013 to 0.039 SDs, and the impact effects of snow days in Maryland ranged from 0.013 to 0.016 SDs. Goodman (2014) studied snow day closures in Massachusetts and found that each day of school closure had null effects on math and reading achievement overall, but that students attending poor schools experienced a decline of 0.014 SDs in math and 0.016 SDs in reading for every day of school closure. A related line of research found that the displacement effect of Hurricane Katrina led to drops in achievement at a magnitude of approximately 0.10 SDs in the year after, though these studies did not investigate effect heterogeneity by student demographics or school poverty (e.g., Sacerdote, 2012). However, these estimates are not comparable to those provided by the snow day literature due to differences in research design and recorded units of time.

Absenteeism

In contrast to the seasonal learning and school closure studies discussed above, an emerging literature on school absenteeism focuses on the impact of instructional time loss due to absences while schools are in session. Unlike the school closure due to the COVID-19 that forces every student to be out of school, not all students are absent during a normal school year. There are numerous reasons for which a student might miss school, including lack of access to reliable transportation and need to care for family members. Minority and low-income students tend to

have more absences and are more likely to be chronically absent (i.e., missing at least 10% of school days), compared with their more affluent peers (Whitney & Liu, 2016).

Research consistently found that absences had negative effects on end-of-year test scores. Several studies that used a value-added model found similar effect sizes in both elementary and secondary schools. Specifically, missing ten school days can decrease student math test scores by 0.06 to 0.08 SDs; the effect sizes for ELA scores were slightly smaller (Aucejo & Romano, 2016; Gershenson, Jacknowitz, & Brannegan, 2017; Liu, Lee, & Gershenson, 2019). Studies that used either flu or snow days as an instrumental variable for absences tended to yield much larger estimates (Aucejo & Romano, 2016; Goodman, 2014) largely due to the specific variation used in estimating the impact of absences. For example, Goodman (2014) found that one moderate snow day-induced absence reduced student math scores by 0.05 SDs. Another takeaway from the absenteeism literature is that the negative effects of absences were linear, meaning that each additional absence caused similar learning loss no matter how many absences a student had already accrued (Gershenson et al., 2017; Liu et al., 2019).

Similarities/Differences Between Out-of-School Time Studies and COVID-19 School

Closures

The literatures on summer vacation, school closures due to weather and natural disasters, and absenteeism indicate that student learning is likely to be negatively impacted by being out of school. While there is a fair amount of variability in the effect size estimates by grade and study (Table 1), some clear trends emerge. Students showed bigger losses in math than reading while out of school. Being absent from school is generally associated with larger impacts on learning than being out of school due to summer vacation, particularly in middle school. Finally, our review suggests that studies on summer loss and absenteeism may provide better (if imperfect)

models for the impact of COVID-19 than the literature on weather-related school closures, which was sparse (only two studies with effect size estimates), generated inconsistent findings, and tended to rely on small sample sizes from specific geographical settings. Accordingly, we draw on the absenteeism effect sizes reported in Table 1, as well as new summer loss analyses, to produce the projections reported in this study.

Before describing our approach, we consider how current and past school closures and their impact on achievement may differ. First, relying on past precedent may overstate the effect of COVID-19 school closures. Specifically, the biggest difference between school closures examined by previous studies and those of COVID-19 is that most school districts are now providing online instruction. Many districts have offered remote learning plans, which may include formal curriculum, assignments, and/or progress-monitoring as well as access to general educational resources. By April 3rd - 4th, 83 percent of parents in a Gallup poll indicated their child was involved in an online learning program from their school (Brenan, 2020). Further, one could imagine that parents of high socioeconomic status (SES) might leverage their cultural capital such that their children actually make larger academic gains than in typical school days, and these gains could further contribute to educational disparities.

Second, there is also evidence suggesting that measures taken by schools may not be as effective as hoped. There are concerning signs that many teachers have had no contact at all with a significant portion of students (Lieberman, 2020). According to national survey of teachers conducted by EdWeek (Kurtz, 2020), as of April 8th only 39% of teachers reported interacting with their students at least once a day, and most teacher-student communication occurred over email. There is also evidence that, even when teachers are making themselves and their instructional materials available virtually, many students lack the means to access online

materials from home. Nearly 50% of low-income families and 42% of families of color lack sufficient devices at home to access distance learning, according to an Education Trust (2020b) poll. Moreover, few school systems provide plans to support students who need accommodations or other special populations (Lake & Dusseault, 2020b). Thus, despite many administrative leaders' and educators' best efforts, students and their families may bear the brunt of the responsibility for ensuring learning continues during the closures.

There is also uncertainty about whether virtual instruction, even when well-implemented, is likely to be as effective as traditional face-to-face instruction. Prior comparisons of online and traditional public schools show that students in online schools lose between 0.1 and 0.4 SDs on standardized tests compared to students in traditional schools (Gill et al. 2015; CREDO, 2015; Ahn & McEachin, 2017). The COVID-19 virtual instruction is somewhat different because students already know their teachers and are potentially doing review rather than being taught new material. However, many public teachers have not been trained on how to provide effective virtual instruction.

Finally, past precedent on out-of-school time may understate the impact of COVID-19 on student learning, especially compared to summer break, which is a wholly anticipated event. The same Education Trust (2020b) poll of California and New York parents found that elevated stress levels for families (parents and children) continue due to economic uncertainty and job loss, fears about catching a life-threatening virus, and the psychological impact of social isolation and disruptions to everyday life. The (almost certainly adverse) effect of these economic and psychological factors on the learning occurring in homes is difficult to anticipate. However, extended school closures due to natural disasters such as Hurricane Katrina and the Christchurch, New Zealand earthquakes may provide some clues. Research suggests the impact of school

disruptions following natural disasters on student development was long lasting, with some students continuing to show psychological distress and trouble concentrating for several years afterwards (Picou & Marshall, 2007; Duncan, 2016).

Given unique elements of the current situation, we are not positioned in this study to speculate about whether current research and historical trends in achievement will likely understate or overstate the effects of COVID-19 school closures on achievement. However, given the scale of our data and what we know from past research, we can make forecasts about potential impacts of COVID-19 based on multiple scenarios and assumptions about how learning might have changed this past school year (2019-20) and will change over the next (2020-21). Even if forecasts can only provide a range of potential impacts based on different assumptions made about the current situation, forecasts are nonetheless invaluable in helping educators and policymakers understand what to expect when students return in the fall, including how learning might progress differently over the course of the 2020-21 school year.

To that end, our study includes several analyses that can prepare educators and policymakers for what they may face next year. First, we produce two sets of possible scenarios for COVID-19 learning loss while students would have otherwise been in school in 2019-20. One set of projections is based on empirical analyses examining summer loss using MAP Growth data. We then compare those projections to a second set of projections for learning loss based on the absenteeism literature, obtained by multiplying the daily learning loss rate from that literature by the days of school missed during the pandemic. Second, we provide estimates of (a) predicted variability in learning rates and (b) predicted variability in student scores at the beginning of the 2020-21 school year that account for the extended time out of school. Third, we go beyond prior school closure research to look not only at the potential effect of school closure

on current achievement, but also the relationship between out-of-school time achievement declines and growth during the following year (i.e., how strongly associated is the magnitude of learning loss with the gains made in the next year?).

Methods

Analytic Sample

The data for this study are from NWEA's anonymized longitudinal student achievement database. School districts use NWEA's MAP Growth assessments to monitor elementary and secondary students' reading and math growth throughout the school year, with assessments typically administered in the fall, winter, and spring. We use the test scores of approximately five million third- to seventh-grade students³ in 18,958 schools across the United States. In this study, we follow students across two school years (2017-18 and 2018-19) and one summer break (summer of 2018). The NWEA data also include demographic information, including student race/ethnicity, gender, and age at assessment, though student-level SES is not available. Table 2 provides descriptive statistics for the sample by subject and grade. Overall, the sample is 51% male, 47% White, 17% Black, 4% Asian, and 18% Hispanic. School-level free or reduced priced lunch (FRPL) eligibility was obtained from the 2017-18 Common Core of Data (CCD) file from the National Center of Education Statistics (NCES). The average student in our sample attends a school that is 51% FRPL-eligible. A comparison of the 18,972 schools in our sample relative to U.S. population of public elementary and middle schools (72,075 schools serving Grades 3-8) is provided in Appendix B of the supplemental materials. Overall, the sample closely aligns to the

³ Due to limited MAP Growth testing in high schools, we did not follow the cohort of 8th graders in 2017-18 into 9th grade in 2018-19.

characteristics of U.S. public schools, with a slight overrepresentation of Black students and underrepresentation of Hispanic students.

Measures of Achievement

Student test scores from NWEA’s MAP Growth reading and math assessments are used in this study. MAP Growth is a computer adaptive test that precisely measures achievement even for students above or below grade level and is vertically scaled to allow for the estimation of gains across time. The MAP Growth assessments are typically administered three times a year (fall, winter, and spring) and are aligned to state content standards. Test scores are reported on the RIT (Rasch unIT) scale, which is a linear transformation of the logit scale units from the Rasch item response theory model.

Projecting COVID-19 School Closure Impacts on Learning Trajectories

In this study, we present two sets of estimates of the potential impacts of COVID-19 school closures on student learning: (a) empirical estimates calculated using MAP Growth data based on summer loss patterns during the summer of 2018, and (b) estimates calculated based on prior absenteeism literature. We begin by describing our empirical approach to estimating students’ academic growth during the school year and learning loss during summer break under normal (pre-COVID-19) conditions. Subsequently, we discuss how we use the absenteeism and summer loss estimates to produce COVID-19 projections.

We first estimated typical growth rates across two school years (2017-18 and 2018-19) and the summer break in between using a series of multilevel growth models (longitudinal test scores nested within students within schools). Following other seasonal learning research studies (e.g., von Hippel et al., 2018; Kuhfeld et al., 2019), we estimated student learning rates as a function of the months that elapsed during the two school years and the summer between. Given

that prior research using MAP Growth data found evidence of non-linearity in students' within-school growth trajectories (Kuhfeld & Soland, 2020), particularly in reading, we modeled student learning rates across the school year using a quadratic function (though a set of models assuming linear growth are also reported in Appendix Tables C3 and C4). Under this model, the test score y_{tij} for student i in school j at timepoint t was modeled as a quadratic function of the months that a student had been exposed to the 2017-18 school year (MonY1_{ij}), the summer of 2018 (Sum_{ij}), and the 2018-19 school year (MonY2_{ij}). At level 1, the growth model can be expressed as:

$$y_{tij} = \pi_{0ij} + \pi_{1ij}\text{MonY1}_{tij} + \pi_{2ij}\text{MonY1}_{tij}^2 + \pi_{3ij}\text{Sum}_{tij} + \pi_{4ij}\text{MonY2}_{tij} + \pi_{5ij}\text{MonY2}_{tij}^2 + e_{tij}. \quad (1)$$

The intercept (π_{0ij}) is the predicted score for student i in school j tested on the first day of the 2017-18 school year, π_{1ij} is the average instantaneous rate of change at the start of the 2017-18 school year, and π_{2ij} is the average rate of change of the linear growth term in 2017-18 for a one-month change in time (e.g., the acceleration or deceleration in growth), π_{3ij} is the monthly summer linear loss rate, and π_{4ij} and π_{5ij} are the linear and quadratic terms in the 2018-19 school year, respectively. At level 2 and 3 of the model, the intercept and growth parameters were allowed to vary among students within schools and between schools:

Level-2 Model (student (i) within school (j)): (2)

$$\pi_{0ij} = \beta_{00j} + r_{0ij}$$

$$\pi_{1ij} = \beta_{10j} + r_{1ij}$$

$$\pi_{2ij} = \beta_{20j}$$

$$\pi_{3ij} = \beta_{30j} + r_{3ij}$$

$$\pi_{4ij} = \beta_{40j} + r_{4ij}$$

$$\pi_{5ij} = \beta_{50j}$$

Level-3 Model (school (j)):

$$\beta_{00j} = \gamma_{000} + u_{00j}$$

$$\beta_{10j} = \gamma_{100} + u_{10j}$$

$$\beta_{20j} = \gamma_{200}$$

$$\beta_{30j} = \gamma_{300} + u_{30j}$$

$$\beta_{40j} = \gamma_{400} + u_{40j}$$

$$\beta_{50j} = \gamma_{500}$$

Variance component specification:

$$e_{tis} \sim N(0, \sigma_{tis}^2), \mathbf{r}_{is} \sim \text{MVN}(\mathbf{0}, \mathbf{T}_{St}), \mathbf{u}_s \sim \text{MVN}(\mathbf{0}, \mathbf{T}_{Sch}).$$

This model was estimated separately by subject (math and reading) and grade (3-7) using HLM Version 7 (Raudenbush, Bryk, & Congdon, 2013). Estimated parameters from these models are reported in Appendix Tables C1 and C2.

We began by calculating “typical” growth rates across a standard 9.5-month school year (assuming students start school on September 1st and end on June 15th). To estimate typical growth, we used the estimated parameter estimates from the 2017-18 school year for each grade g and subject separately:

$$\widehat{\text{RIT}}_{tg} = \hat{\gamma}_{000} + (\hat{\gamma}_{100}) * \text{Mon}_t + (\hat{\gamma}_{200}) * \text{Mon}_t^2, \quad (3)$$

where Mon_t takes values from 0 to 9.5. We then calculated “typical” summer loss across a 2.5-month summer:

$$\widehat{\text{SumLoss}}_{tg} = (\hat{\gamma}_{300}) * \text{SumMon}_t, \quad (4)$$

where SumMon_t takes values from 0 to 2.5 months. Under the standard-length school year, students end the year at their 9.5-month achievement level ($\widehat{\text{RIT}}_{9.5g}$) and then were assumed to

lose ground linearly across a 2.5-month summer. We provided the “typical” school year growth rates and summer loss as a reference for the COVID-19 projections described below.

The first scenario, which we refer to as “COVID Loss Summer Slide”, assumes that typical summer loss patterns would extend through the prolonged school closure. Linear projections were made based on the same $\widehat{\text{SumLoss}}_{tg}$ calculation described above, but starting from the projected achievement level at 6.5 months ($\widehat{\text{RIT}}_{6.5g}$) and extending to the presumed start of the next school year (12 months, September 1st). During the “normal” summer period (9.5 to 12 months), the typical summer loss and COVID Loss Summer Slide rates were the same, and so these lines were parallel during the summer months (June 15th to September 1st).

The second scenario for our COVID-19 projections, which we refer to as “COVID Loss Absenteeism”, draws on existing absenteeism literature. We first calculated an average effect size (in SD units) for each day missed of school by subject based on the effect sizes reported in Table 1 (e.g., an average -0.007 SDs per day in math and -0.004 SDs per day in reading). Next we converted these estimates into monthly losses on the RIT scale using NWEA’s subject- and grade-specific achievement norms (Thum & Kuhfeld, 2020), assuming there are approximately 20 potential instructional days in a typical month and that students are absent during the entire school closure period. Given the majority of schools in the U.S. shut down around the week of March 15th (6.5 months into the school year), we used students’ projected achievement level at 6.5 months ($\widehat{\text{RIT}}_{6.5g}$) as the starting point for the projection and then assumed students lose ground from that point at that monthly rate calculated for each subject/grade. Given that students can only be absent while schools are still in session, we produced absenteeism projections only to the end of the school year (9.5 months).

RQ1. Possible Scenarios for Learning Gains during the 2019-20 School Year

To display the possible scenarios for learning as a result of the school closures during the 2019-20 school year, we produced a set of plots to compare these empirical- and literature-based projections to typical learning rates. The plots display students' estimated learning rates across the 2019-20 school year and summer of 2020 based on the absenteeism and summer loss projections. In addition to the plots, we also reported the impact of school closures as a percentage of learning gains that students were expected to make relative to a typical school year. These percentages were calculated by estimating the total gains during the school year (subtracting the initial score on September 1st, 2019 from the projected score on June 15th, 2020) under the two different COVID Loss assumptions and dividing those estimates by the total gains expected under typical growth.

RQ2. Quantifying Variability in COVID-19 Impacts

We do not expect that all students will be impacted by COVID-19 school closures equally. Prior summer learning loss research indicated that there is a considerable variability in students' learning patterns over the summer (e.g., Atteberry & McEachin, 2019; Kuhfeld et al., 2019), most of which cannot be explained by observed student and family characteristics (von Hippel et al., 2019; Kuhfeld, 2019; Borman, Benson, Overman, 2005). In addition to producing average estimates of learning rates during time out of school, we estimated variation in these learning rates across students. Specifically, we used the variance term of the within-school summer loss random effect (r_{3ij}) to examine the potential variability in COVID-19 impacts based on learning patterns during the summer of 2018. Based on the average monthly summer loss rate ($\hat{\gamma}_{300}$) and the standard deviation of the learning loss across students within the same school ($T_{St(3,3)}$), we calculated the monthly learning rates for students at the 25th, 50th, and 75th

percentiles of the summer learning distribution. These estimates were then plotted to allow for an examination of the potential spread in fall 2020 RIT scores by grade/subject assuming students maintained the same rate of growth from school closure (March 15th) to the start of the 2020-21 school year.

There are two potential limitations to this approach. First, while this approach allowed us to quantify variability in potential growth rates while students are out of school, it did not provide a direct estimate of the possible variability in test scores when students return to school following the COVID-19 school closures. Second, it ignored the correlation between gains made while in school and losses that occur out of school. Prior research has indicated school-year and summer learning are negatively correlated, with students who made the largest gains during the school year showing the biggest drops in the summer (e.g., Kuhfeld, 2019; von Hippel et al., 2018).

Therefore, we also used the empirical Bayes (EB) estimates of students' learning rates from our models to project students' achievement in fall 2020 under two scenarios. Under the first scenario, we used the EB estimates from the 2017-18 school year and the summer of 2018 to produce projected scores at the start of the 2018-19 school year. These projected fall scores were treated as what would be expected in fall 2020 under "business as usual", had students completed the full 2019-20 school year and a typical summer break. The fall RIT scores are predicted using the following equation, in which $\hat{\gamma}$ are parameter estimates from the model and \hat{r} are EB estimates of the random intercepts and slopes:

$$\widehat{RIT}_{Typical_{Fall},gij} = \hat{\gamma}_{000} + \hat{r}_{0ij} + (\hat{\gamma}_{100} + \hat{r}_{1ij}) * 9.5 + (\hat{\gamma}_{200}) * 9.5^2 + (\hat{\gamma}_{300} + \hat{r}_{3ij}) * 2.5. \quad (5)$$

In the second scenario, we assumed that COVID-19 increased the effects of summer loss by extending out of school time. In this case, projected fall scores were calculated for each student assuming a 6.5-month school year followed by a 5.5-month summer break, using the following equation:

$$\widehat{RIT}_{COVID_{Fall},gij} = \hat{\gamma}_{000} + \hat{r}_{0ij} + (\hat{\gamma}_{100} + \hat{r}_{1ij}) * 6.5 + (\hat{\gamma}_{200}) * 6.5^2 + (\hat{\gamma}_{300} + \hat{r}_{3ij}) * 5.5 \quad (6)$$

Further details on the calculation of the projected scores under each scenario are provided in Appendix D. We then compared the distribution of scores under each condition to understand how much more variable the fall scores were under the COVID-19 Summer Slide assumption relative to a normal fall.

RQ3. Estimating the Relationship Between Summer Loss and Next School Year’s Growth

To guide planning to support student learning during this pandemic and school closures, it is important to understand not only the possible impact of school closures on student learning, but also whether students with large losses recover at similar or different rates than other students. To investigate this question, we examined the correlation among the learning rates during the summer of 2018 and in the 2018-19 school year. Specifically, we examined the level-2 random effect correlation matrix to understand the association between out of school learning rates and growth in the following school year. Though the empirical data are from a typical school year and summer, the results from this analysis can inform decision-making by serving as a proxy for student learning recovery post-COVID-19.

Results

RQ1. Possible Scenarios for Learning Gains during the 2019-20 School Year

Projected COVID-19 impacts on average academic growth trajectories are presented in Figure 1 for mathematics (Panel A) and reading (Panel B). In a typical year (shown as solid lines), average academic growth is not constant across the academic year (shown as the curved lines seen in some grades) and generally declines from the last day of school through the summer, with steeper declines in mathematics than in reading. The dashed line shows projected trajectories based on prior absenteeism literature (from COVID-19 school closure to the end of the 2019-20 school year), and dotted lines show projected trajectories under summer learning loss patterns (from COVID-19 school closure to start of the 2020-21 school year). Since the absenteeism estimates pertain to missing school while schools are still open, we did not extend the COVID Loss Absenteeism projections past June 15th.

Under both sets of projections, students' learning gains are projected to be substantially lower at the end of the school year than under typical conditions. The COVID Loss Absenteeism projections for losses in learning are more dire than the COVID Loss Summer Slide projections, implying steeper drops while students are out of school across all grades and subjects. We also calculated the percentage of learning gains that students would be expected to have made relative to a normal year under each condition. Our results suggest that under the COVID Loss Summer Slide projections, students end the abbreviated 2019-20 school year with roughly 63-68% of the learning gains in reading relative to a typical school year (see Table D1 in the supplemental materials). However, in mathematics, students are likely to show much smaller gains, ending the school year with 37-50% of the average gains in a normal school year. For students moving from fifth to sixth grade, we expect under COVID Loss Summer Slide projections that students end the school year with only 19% of total mathematics gains. Under the COVID Loss Absenteeism projections, the story is even more dire, with students in sixth and seventh grade projected to end the school year with less than 30% of their typical learning gains in both math and reading.

RQ2. Quantifying Variability in COVID-19 Impacts

Beyond average achievement, educators may be equally concerned about whether COVID-19 will result in greater variability in the academic skills that students bring with them when school resumes. In Figure 2, we display the variability in learning expected under the COVID Loss Summer Slide model from March 15th (when schools shut down) to September 1st (when schools are expected to reopen). These estimates are based on variability seen during a typical summer, but with the duration of that summer extended. For parsimony, we only display Grades 4 and 6, but the model-based variability estimates for all grades/subjects are presented in Table D3 of the supplemental materials. The shaded areas display the spread in potential outcomes between students who were in the 25th percentile of summer learning loss (who showed steep declines) and those in the 75th percentile (who showed flat scores or even small gains during the summer). In mathematics, we see a fair amount of variability in learning rates, though the majority of students show losses over the extended closure and summer period. However, in reading, there is an even wider spread of potential outcomes, with students who are in the 75th percentile and above showing sizable learning gains during the summer. As seen in Table D3, approximately the upper half of the distribution (39-46% of students) are projected to show monthly gains in reading during the summer. Altogether, these plots show that extended time out of school may lead to more variability in achievement when students return in the fall.

One limitation of the plots in Figure 2 is that they do not provide concrete evidence on the variability in fall achievement under COVID-19 *relative* to variability under a typical school year. Thus, in Figure 3 we display the spread of the projected fall 2020 test scores under “typical” conditions as well as the COVID Loss Summer Slide projections. The box plot shows the interquartile range (e.g., the 25th, 50th, and 75th percentiles) and the vertical lines extending

above and below the box stretch one and half times the interquartile range, with scores outside that range displayed as outliers (circles in the figure). The estimated means, SDs, and percentiles scores for each condition and grade/subject are reported in Table D3 in the supplemental materials. Across the board, students are projected to return in the fall with lower scores and more variability relative to a typical fall. In reading, the SDs of expected scores are expected to be up to 1.2 times the SDs expected in a typical fall. Thus, students will likely return not only with lower achievement (on average), but with a wider range of academic skills that may require teachers to further differentiate instruction.

RQ3. Estimating the Relationship Between Summer Loss and Next School Year's Growth

Finally, to project whether larger COVID-19 learning losses would be associated with faster growth rates during the 2020-21 school year, we examined whether students who lost more ground during a typical summer showed slower rates of recovery during the subsequent typical school year. Correlations between students' summer loss and linear growth during the 2018-19 school year are presented in Tables C1 and C2 in the supplemental materials. In mathematics, student-level correlations ranged from -0.41 to -0.43, and in reading the correlations ranged from -0.45 to -0.46. These correlations imply that students who lost more ground during the summer of 2018 showed steeper growth during the following school year (2018-19) than students with less summer loss. Accordingly, this suggests that a student who lost ground during the summer does not necessarily continue to lose ground during the next school year; rather, they are likely to gain ground.

Discussion

Educators, policymakers, families, and students find themselves in uncharted territory during the COVID-19 crisis. School districts in particular are on the front lines to help ensure all

students have access to academic materials, instruction, and digital resources, among other basic needs such as food for students from low income backgrounds and support for students with disabilities, English learners, and students in temporary housing (Education Trust, 2020a). Despite these efforts, a majority of parents with children in K-12 schools are concerned that their children will fall behind academically due to the disruptions of COVID-19 school closures (Horowitz, 2020). In this study, we produced a set of possible scenarios for learning loss rates during the extended period when schools are physically closed and students are not receiving normal face-to-face instruction. These projections can help prepare educators and parents for the degree of variability in student achievement to expect when school resumes, including over the course of the upcoming school year.

First, we show that students will likely (a) not have grown as much during the truncated 2019-2020 academic year and (b) will likely lose more of those gains due to extended time out of school. Based on our projections, students will return in fall 2020 with approximately 63-68% of the learning gains in reading relative to a typical school year and with 37-50% of the learning gains in math. In some grades, students may come back close to a full year behind in math. While such projections may reinforce the worst fears of educators and parents, we should note that they do not factor in the home schooling and online instruction that students may currently be receiving. Therefore, they should be viewed as a likely upper bound for the potential negative effects on students' learning.

Second, we also examined variability in possible learning outcomes during the school closures and in the fall of 2020. We found that losing ground over the summer was not universal, with the top third of students in reading making gains during a typical summer. As a result of this variability, we project that the range of students' academic achievement will be more spread out

in the fall of 2020 relative to a normal fall term, particularly in reading. In presenting these projections, we assume that the variability in typical summer loss can act as a proxy for the large variability in learning that is expected due to the widely differing home and school district conditions impact learning during the school closure period. In all likelihood, differential access to parent and teacher supports for learning during the school closure months will produce variation larger than what typical summer break variability would imply.

Finally, we show that, although our projections are dire, our models also suggest that students who lose the most while out of school tend to gain the most the following year (at least under typical summer loss conditions). Thus, there is hope that students most impacted by the additional average achievement losses under COVID-19 may also be the ones who rebound the most by the end of the 2020-21 academic school year. At the same time, one cannot be sure how financial uncertainty, health issues related to the virus, and psychological stresses may affect the association between summer loss and subsequent academic growth.

Limitations of Our Projections

While we provide two sets of projections in this study—one based on growth rates calculated from MAP Growth data and the other based on prior literature on student absenteeism—we acknowledge that it is impossible to accurately weigh the complex range of supports and challenges that students are facing during this period. The school closures caused by COVID-19 have additional aspects of trauma to students, loss of resources, and loss of opportunity to learn that go well beyond a traditional summer break for many families. In other words, families with financial resources, stable employment, and flexible work-from-home and childcare arrangements will likely weather this storm more easily than families who are renting their housing, working in low-paying fields that are hardest hit by the economic impacts, and

experiencing higher rates of food insecurity, family instability, and other shocks from this disruption.

Given the uncertain impact of COVID-19, we have chosen not to make projections specific to inequalities by race/ethnicity, biological sex, and SES. Recent analyses of both ECLS-K and MAP Growth data have found little evidence that achievement gaps by race/ethnicity and SES widen during summer months (von Hippel & Hamrock, 2019; Kuhfeld, 2019). This is likely due to the fact that families of all income levels typically treat summer break as a vacation from math and reading, a time when “kids can be kids” (von Hippel, 2020). Were we to base estimates of COVID-19 impacts on racial/ethnic disparities in achievement and growth on these historical summer learning loss patterns, we would likely conclude that the COVID-19 pandemic is going to minimally impact long-standing inequalities in this country.

However, there are many reasons to believe the COVID-19 impacts might be larger for children in poverty and children of color. There are higher rates of COVID-19 infections and deaths in the African American community (Bouie, 2020), and the economic downturn has been particularly damaging for African American and Hispanic parents, who are less likely to be able to work from home during the pandemic (Krogstad, Gonzalez-Barrera, & Noe-Bustamente 2020; Cerullo, 2020). Furthermore, the so-called “digital divide” in technology and internet access by race/ethnicity and socioeconomic status (Musu, 2018) likely contributes to greater inequalities during the COVID-19 pandemic than a typical summer. Given this evidence that the impacts of the COVID-19 school closures will have disproportionate impacts on our country’s most underserved communities in ways that historic summer data fails to capture, we chose not to produce projections based on pre-COVID-19 MAP Growth summer learning data for individual

subgroups. However, we believe it will be of great importance to study how existing inequalities have widened or been reshaped once schools have reopened.

Furthermore, in calculating the projected impact of out-of-school time on learning in this study, we assumed that it is appropriate to linearly extrapolate learning loss from research on absenteeism and summer loss across the three months of school closure. Liu and colleagues (2019) found that additional absences had an approximately linear impact on student learning, though the number of absences assumed in this study (approximately 60 school days) far exceeds the average number of absences observed in their study. Furthermore, we have very little data about whether the summer months have a linear impact on students' reading and mathematics skills. Campbell and Frey (1970) hypothesize that forgetting learned material may occur non-linearly, with rapid initial deceleration of knowledge followed by slower drop offs as time passes. However, we are unaware of any studies that have examined this phenomenon in the context of summer break. If the true effect of being out of school accelerates the longer students are out of school, we could be underestimating the impact on learning. But if summer loss simply reflects a process of forgetting and re-remembering that is not directly linked to the amount of time out of school, we could be greatly over-estimating the potential impacts on learning.

Where Do We Go From Here?

While we are not well-positioned to make recommendations for ways to remedy the learning loss that is likely occurring due to COVID-19, our results do provide takeaways that can inform how educators and leaders can prepare to support students upon return. First, we show that students may be substantially behind, especially in mathematics. Thus, teachers of different grade levels may wish to coordinate in order to determine where to start instruction. Educators

will also need to find ways to assess students early, either formally or informally, to understand exactly where students are academically.

Second, students are likely to enter school with more variability in their academic skills than under normal circumstances. Prior research suggests greater heterogeneity in student achievement affects a classroom teacher's ability to adapt instruction to meet the instructional needs of all students (Connor, Piasta, Fishman, Glasney, Schatschneider, Crowe, & Morrison, 2009; Evertson, Sanford, & Emmer, 1981). Therefore, educators may need to consider ways to further differentiate instruction or provide opportunities for individualized learning. For a summary of related literature, one could turn to Peters, Rambo-Hernandez, Makel, Matthews, and Plucker (2017).

Third, under typical schooling conditions, the students who lose the most during the summer tend to gain the most when back in school. Nonetheless, the ground that students have to make up during the 2020-21 academic year will probably be greater due to COVID-19. Therefore, educators may want to work with students to determine growth rates needed to catch up and set learning goals for the year that are ambitious but obtainable. These strategies might include establishing out-of-school learning supports during the 2020-21 school year for the students most affected by school closures.

Finally, the effects of COVID-19 to which our study cannot speak may be ones most worthy of addressing. Districts are rushing to support educators who are attempting to teach academic content remotely while also caring for their students' social emotional well-being. Prior research on students displaced by Hurricane Katrina indicated that students had difficulty concentrating and often manifested symptoms of depression in the months following the hurricane (Picou & Marshall, 2007). Understanding these impacts and how to best support

students' social and emotional needs after this huge disruption of COVID-19 will be essential. Many students may face greater food insecurity, loss of family income, loss of family members to the coronavirus, and fear of catching the virus themselves (NAACP, 2020). While the scale of the COVID-19 school closures is novel, the inequalities in our school systems are unfortunately anything but new. Our models cannot account for the reality that the crisis is having an unequal impact on our most underserved communities. Nonetheless, we hope these analyses, which synthesize what we know from existing bodies of research, will inform tomorrow's decision making.

Conclusions

These preliminary forecasts parallel many education leaders' fears: missing school for a prolonged period will likely have major impacts on student achievement. Further, students will likely return in the fall of 2020 with greater variability in their academic skills. While we are unable to account for students' exposure to virtual instruction while schools are closed, our learning loss projections imply that educators and policymakers will need to prepare for many students to be substantially behind academically when they return.

Similar to the research that found students took nearly two full years to make up lost ground for the loss in instructional time due to Hurricane Katrina (Harris & Larsen, 2019), our COVID Loss projections provide new evidence on the scope of the long-term educational recovery efforts that will be required. We believe this study is one in a growing body of important work that leverages prior research to empower school leaders, policy makers, and researchers to make urgent evidence-informed post-COVID-19 recovery decisions.

References

- Ahn, J. & McEachin, A. (2017). student enrollment patterns and achievement in Ohio's online charter schools. *Educational Researcher*, 46(1), 44–57.
- Alexander, K.L., Entwisle, D.R., & Olson, L.S. (2007). Lasting consequences of the summer learning gap. *American Sociological Review*, 72 (2), 167-180.
- Atteberry, A. & McEachin, A. (2020). School's out: The role of summers in understanding achievement disparities. (EdWorkingPaper: 20-82). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/2mam-bp02>.
- Aucejo, E. M. & Romano, T. F. (2016) Assessing the effect of school days and absences on test score performance. *Economics of Education Review*, 55, 70-87.
- Bouie, J. (2020). Why Coronavirus is killing African-Americans more than others. New York Times. Retrieved from <https://www.nytimes.com/2020/04/14/opinion/coronavirus-racism-african-americans.html>.
- Brenan, M. (2020, April 8). *Over 8 in 10 parents now say child is learning remotely*. Gallup. Retrieved from <https://news.gallup.com/poll/307754/parents-say-child-learning-remotely.aspx>.
- Campbell, D. T., & Frey, P. W. The implications of learning theory for the fade-out of gains from compensatory education. In J. Hellmuth (Ed.), *Compensatory education: A national debate, disadvantaged child*, vol.3. New York: Brunner/Mazel, 1970.
- Cerullo, M. (2020, March 23). *Black and Hispanic workers less able to work from home*. CBS News. Retrieved from <https://www.cbsnews.com/news/work-from-home-black-hispanic-workers/>.
- Connor, C. M., Piasta, S. B., Fishman, B., Glasney, S., Schatschneider, C., Crowe, E., ... & Morrison, F. J. (2009). Individualizing student instruction precisely: Effects of child by

- instruction interactions on first graders' literacy development. *Child Development*, 80(1), 77.
- Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66 (3), 227-268.
- CREDO. (2015). *Online charter school study*. Stanford, CA: Center for Research on Education Outcomes, Stanford University.
- Duncan, J. (2016). CPPA Inquiry into the Ministry of Education's post-earthquake response for education in Christchurch. Christchurch, New Zealand: Canterbury Primary Principals Association.
- Education Trust. (2020a). COVID-19: Impact on education equity: Resources and responses. Retrieved April 18, 2020 from <https://edtrust.org/covid-19-impact-on-education-equity-resources-responding/>.
- Education Trust. (2020b). CA & NY parents overwhelmingly concerned their children are falling behind during school closures. Retrieved April 18, 2020 from <https://edtrust.org/ca-ny-parents-overwhelmingly-concerned-their-children-are-falling-behind-during-school-closures/>.
- Education Week (2020). Map: Coronavirus and school closures. Retrieved from <https://www.edweek.org/ew/section/multimedia/map-coronavirus-and-school-closures.html>.
- Evertson, C. M., Sanford, J. P., & Emmer, E. T. (1981). Effects of class heterogeneity in junior high school. *American Education Research Journal*, 18, 219-232.

Gershenson, S., Jackowitz, A., & Brannegan, A. (2017). Are student absences worth the worry in US primary schools? *Education Finance and Policy*, 12 (2), 137-165.

Gill, B., Walsh, L., Wulsin, C. S., Matulewicz, H., Grau, E., Lee, A., Kerwin, T., (2015). *Inside online charter schools*. Cambridge, MA: Mathematic Policy Research.

Goodman, J. (2014). *Flaking out: Student absences and snow days as disruptions of instructional time*. NBER Working paper 20221.

Hansen, B. (2011). *School Year Length and Student Performance: Quasi -Experimental Evidence*. Social Science Research Networking Paper.

Harris, D. and Larsen, M. (2019). *The effects of the New Orleans post-Katrina market-based school reforms on medium-term student outcomes*. Education Research Alliance for New Orleans. Retrieved from <https://educationresearchalliancenola.org/files/publications/Harris-Larsen-Reform-Effects-2019-08-01.pdf>.

Horowitz, J. M. (2020, April 15). *Lower-income parents most concerned about their children falling behind amid COVID-19 school closures*. Retrieved from <https://www.pewresearch.org/fact-tank/2020/04/15/lower-income-parents-most-concerned-about-their-children-falling-behind-amid-covid-19-school-closures/>

Kuhfeld, M., Condrón, D., & Downey, D. (2019). When does inequality grow? A seasonal analysis of racial/ethnic disparities in learning in kindergarten through eighth grade. (The Collaborative for Student Growth at NWEA Working Paper). <https://www.nwea.org/resource-library/research/when-does-inequality-grow-3>.

Kuhfeld, M. (2019). Surprising new evidence on summer learning loss. *Phi Delta Kappan*, 101 (1), 25-29.

Kuhfeld, M. & Tarasawa, B. (2020). *The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement.*

NWEA.

Kuhfeld, M., & Soland, J. (2020). *The learning curve: Revisiting the assumption of linear growth across the school year.* (EdWorkingPaper: 20-214). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/bvg0-8g17>.

Krogstad, J.M., Gonzalez-Barrera, A. & Noe-Bustamente, L. (2020, April 3). *U.S. Latinos among hardest hit by pay cuts, job losses due to Coronavirus.* Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2020/04/03/u-s-latinos-among-hardest-hit-by-pay-cuts-job-losses-due-to-coronavirus/>.

Kurtz, H. (2020, April 10). National survey tracks impact of coronavirus on schools: 10 key findings. *Education Week*. Retrieved from <https://www.edweek.org/ew/articles/2020/04/10/national-survey-tracks-impact-of-coronavirus-on.html>

Lake, R. & Dusseault, B. (2020a). *Remote classes are in session for more school districts, but attendance plans are still absent.* Center for Reinventing Public Education. Retrieved April 29, 2020, from https://www.crpe.org/thelens/remote-classes-are-session-more-school-districts-attendance-plans-are-still-absent_

Lake, R. & Dusseault, B. (2020b). *School systems make a slow transition from the classroom to the cloud.* Center for Reinventing Public Education. Retrieved April 18, 2020, from <https://www.crpe.org/thelens/school-systems-make-slow-transition-classroom-cloud>.

- Lieberman, M. (2020, April 17). *Taking attendance during coronavirus closures: Is it even worth it?* Retrieved from <https://www.edweek.org/ew/articles/2020/04/17/taking-attendance-is-tricky-during-coronavirus-closures.html>
- Liu, J., Lee, M., & Gershenson, S. (2020). *The Short- and Long-Run Impacts of Secondary School Absences*. (EdWorkingPaper: 20-125). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/xg6s-z169Q>
- Musu, L. (2018, October). *The Digital Divide: Differences in Home Internet Access*. Retrieved from <https://nces.ed.gov/blogs/nces/post/the-digital-divide-differences-in-home-internet-access>
- NAACP. (2020, March). *Ten equity implications of the Coronavirus COVID-19 outbreak in the United States*. Retrieved from https://naacp.org/wp-content/uploads/2020/03/Ten-Equity-Considerations-of-the-Coronavirus-COVID-19-Outbreak-in-the-United-States_Version-2.pdf.
- National Center for Educational Statistics (2018). *Digest of Education Statistics: 2018*. Retrieved from https://nces.ed.gov/programs/digest/d18/tables/dt18_203.10.asp.
- Peters, S. J., Rambo-Hernandez, K., Makel, M. C., Matthews, M. S., & Plucker, J. A. (2017). Should millions of students take a gap year? Large numbers of students start the school year above grade level. *Gifted Child Quarterly*, 61(3), 229-238.
- Picou, J. S., & Marshall, B. K. (2007). Social impacts of Hurricane Katrina on displaced K-12 students and educational institutions in coastal Alabama counties: Some preliminary observations. *Sociological Spectrum*, 27, 767-780.
- Quinn, D., & Polikoff, M. (2017). *Summer learning loss: What is it, and what can we do about it*. Washington, DC: Brookings Institution. Retrieved from <https://www.brookings.edu/research/summer-learning-loss-what-is-it-and-what-can-we-do-about-it/>.

- Sacerdote, B. (2012). When the saints go marching out: Long-term outcomes for student evacuees from Hurricanes Katrina and Rita. *American Economic Journal: Applied Economics*, 4(1), 109-135.
- von Hippel, P. T., & Hamrock, C. (2019). Do test score gaps grow before, during, or between the school years? Measurement artifacts and what we can know in spite of them. *Sociological Science*, 6, 43–80.
- von Hippel, P. T. (2019). Is summer learning loss real? *Education Next*. Retrieved from <https://www.educationnext.org/is-summer-learning-loss-real-how-i-lost-faith-education-research-results/>
- von Hippel, P. T., Workman, J., & Downey, D. B. (2018). Inequality in reading and math skills forms mainly before kindergarten: A replication, and partial correction, of “Are schools the great equalizer?” *Sociology of Education*, 91(4), 323-357.
- von Hippel, P.T (2020). How will the coronavirus crisis affect children’s learning? Unequally. Retrieved from <https://www.educationnext.org/how-will-coronavirus-crisis-affect-childrens-learning-unequally-covid-19/>.

Table 1

Estimates of the Impact of Out-of-School Days on Standardized Test Scores Across Summer Loss, School Closure, and Absenteeism Literature

| Citation | Location | Grade level | Math Effect | ELA Effect |
|--|--------------------------------|----------------------|-----------------------|------------|
| Summer Loss | | | | |
| Atteberry & McEachin (2019) | National (NWEA) | 1st grade | -0.009 | -0.010 |
| | | 2nd grade | -0.006 | -0.006 |
| | | 3rd grade | -0.006 | -0.005 |
| | | 4th grade | -0.005 | -0.003 |
| | | 5th grade | -0.005 | -0.003 |
| | | 6th grade | -0.003 | -0.002 |
| | | 7th grade | -0.002 | -0.001 |
| von Hippel, Workman, & Downey (2018) | National (ECLS-K:2011) | Kindergarten | 0.002 | -0.001 |
| | | 1st grade | -0.001 | -0.001 |
| Kuhfeld, Condron, & Downey (2019) | National (NWEA) | Kindergarten | -0.005 | -0.004 |
| | | 1st grade | -0.007 | -0.004 |
| | | 3rd grade | -0.006 | -0.004 |
| | | 4th grade | -0.005 | -0.003 |
| | | 6th grade | -0.004 | -0.002 |
| | | 7th grade | -0.002 | -0.001 |
| Absenteeism | | | | |
| Liu, Lee, & Gershenson (2020) | large urban CA school district | 6th-8th grade | -0.008 | -0.006 |
| Gershenson, Jacknowitz, & Brannegan (2017) | ECLS-K + NC | K-1st grade | -0.002 | -0.002 |
| | NC public schools | 3rd-5th grade | -0.007 | -0.004 |
| Aucejo & Romano (2016) | NC public schools | 3rd-5th grade | -0.006 | -0.003 |
| School Closures due to Inclement Weather | | | | |
| Hansen (2011) | CO and MD public schools | 8th grade (CO) | -0.013 to -0.039 | N/A |
| | | 3rd grade (MD) | -0.003 to -0.011 (NS) | |
| | | 5th grade (MD) | -0.015 to -0.016 | |
| | | 8th grade (MD) | -0.009 to -0.013 | |
| Goodman (2014) | MA public schools | 3rd-8th + 10th grade | -0.000 (NS) | 0.003 (NS) |

Note. ECLS-K=Early Childhood Longitudinal Study, Kindergarten Cohort, CA=California, NC=North Carolina, CO=Colorado, MD=Maryland, MA=Massachusetts, NS=Not significant. All coefficients are reported as drops in standard deviation units on math and reading/English Language Arts assessments for each day of school missed. More details on each study are presented in Appendix Table A1.

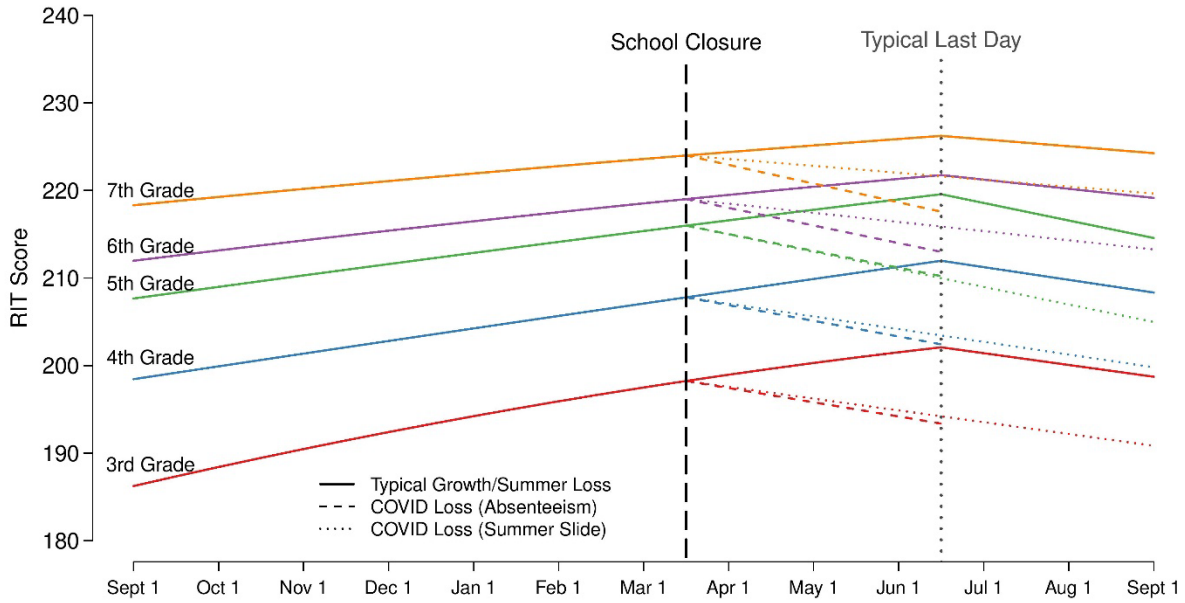
Table 2

Descriptive Statistics for the Sample

| Grade | N. Schools | N. Students | Race/ethnicity | | | | | Male | % FRPL |
|-------------|------------|-------------|----------------|-------|-------|----------|------------|------|--------|
| | | | White | Black | Asian | Hispanic | Other race | | |
| Mathematics | | | | | | | | | |
| 3 | 12,816 | 986,862 | 0.45 | 0.18 | 0.04 | 0.18 | 0.14 | 0.51 | 0.51 |
| 4 | 13,071 | 999,788 | 0.46 | 0.17 | 0.04 | 0.18 | 0.14 | 0.51 | 0.50 |
| 5 | 14,146 | 1,029,363 | 0.47 | 0.17 | 0.05 | 0.18 | 0.13 | 0.51 | 0.50 |
| 6 | 8,952 | 976,105 | 0.47 | 0.17 | 0.04 | 0.18 | 0.14 | 0.51 | 0.50 |
| 7 | 7,040 | 937,054 | 0.47 | 0.16 | 0.04 | 0.18 | 0.13 | 0.51 | 0.50 |
| Full Sample | 18,972 | 4,929,172 | 0.47 | 0.17 | 0.04 | 0.18 | 0.14 | 0.51 | 0.50 |
| Reading | | | | | | | | | |
| 3 | 12,874 | 988,644 | 0.45 | 0.18 | 0.04 | 0.18 | 0.14 | 0.51 | 0.51 |
| 4 | 13,066 | 997,088 | 0.47 | 0.18 | 0.04 | 0.18 | 0.14 | 0.51 | 0.51 |
| 5 | 14,129 | 1,026,057 | 0.47 | 0.17 | 0.04 | 0.18 | 0.13 | 0.51 | 0.50 |
| 6 | 8,943 | 970,524 | 0.47 | 0.17 | 0.04 | 0.18 | 0.14 | 0.51 | 0.50 |
| 7 | 6,995 | 934,960 | 0.48 | 0.17 | 0.04 | 0.18 | 0.13 | 0.51 | 0.50 |
| Full Sample | 18,958 | 4,917,273 | 0.47 | 0.17 | 0.04 | 0.18 | 0.14 | 0.51 | 0.50 |

Note. N=Number, %FRPL=percentage of free or reduced priced lunch. Grade is the grade level students were in during the 2017-18 school year.

(A) Mathematics Projections



(B) Reading Projections

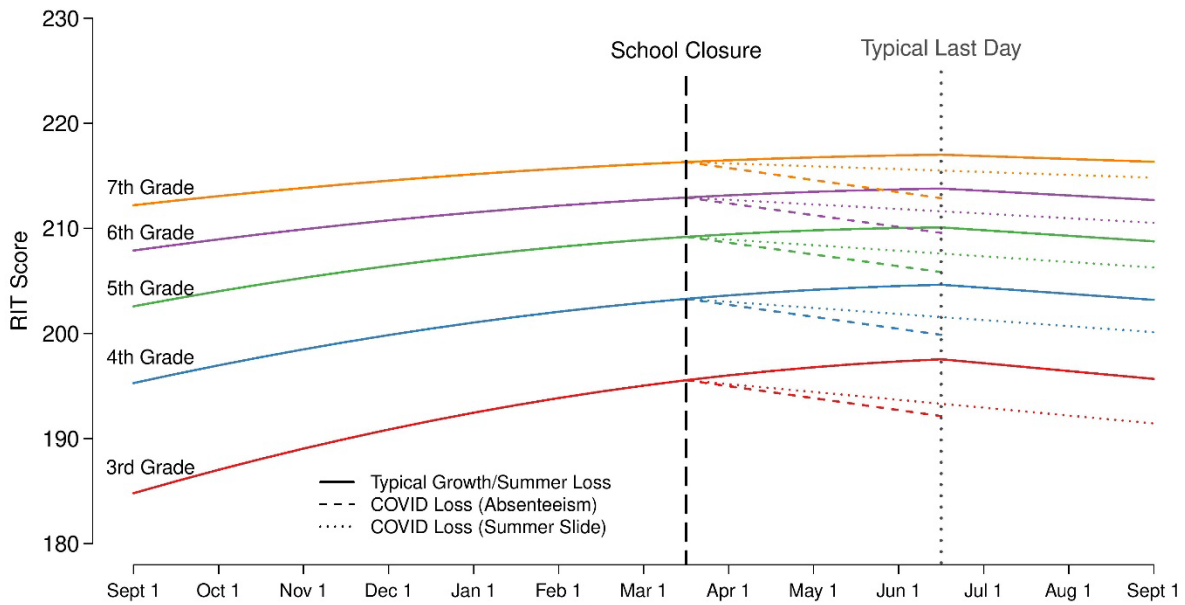
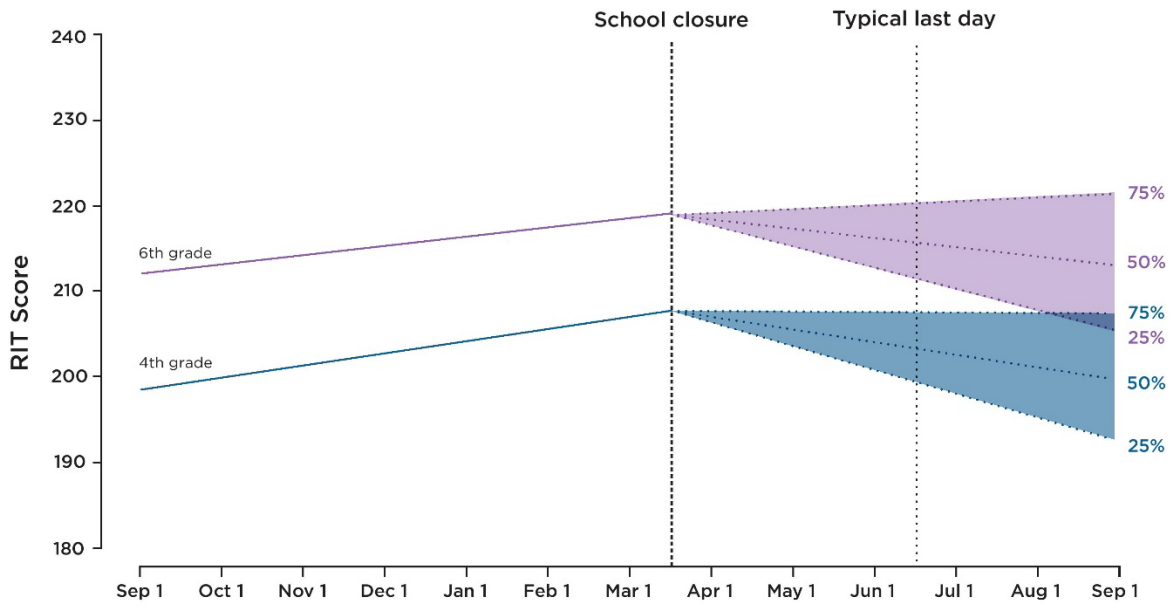


Figure 1. Mathematics and reading forecasts based on summer loss estimates and absenteeism literature.

(A) Mathematics Projections



(B) Reading Projections

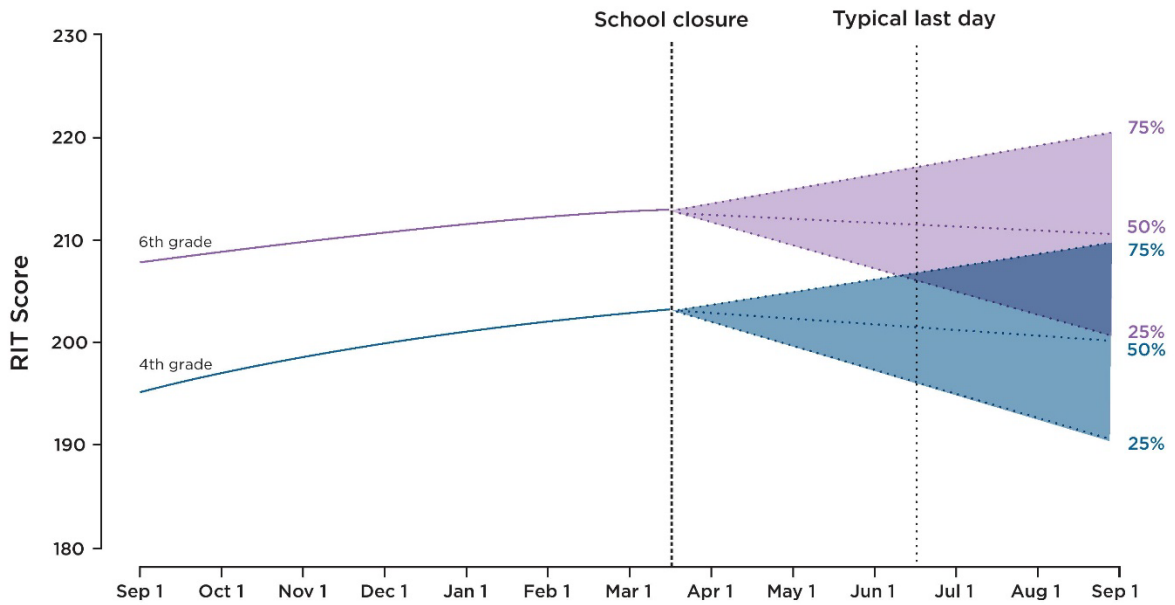


Figure 2. Mathematics and reading forecasts for the 2019-20 school year accounting for the variability observed in typical summer loss patterns.

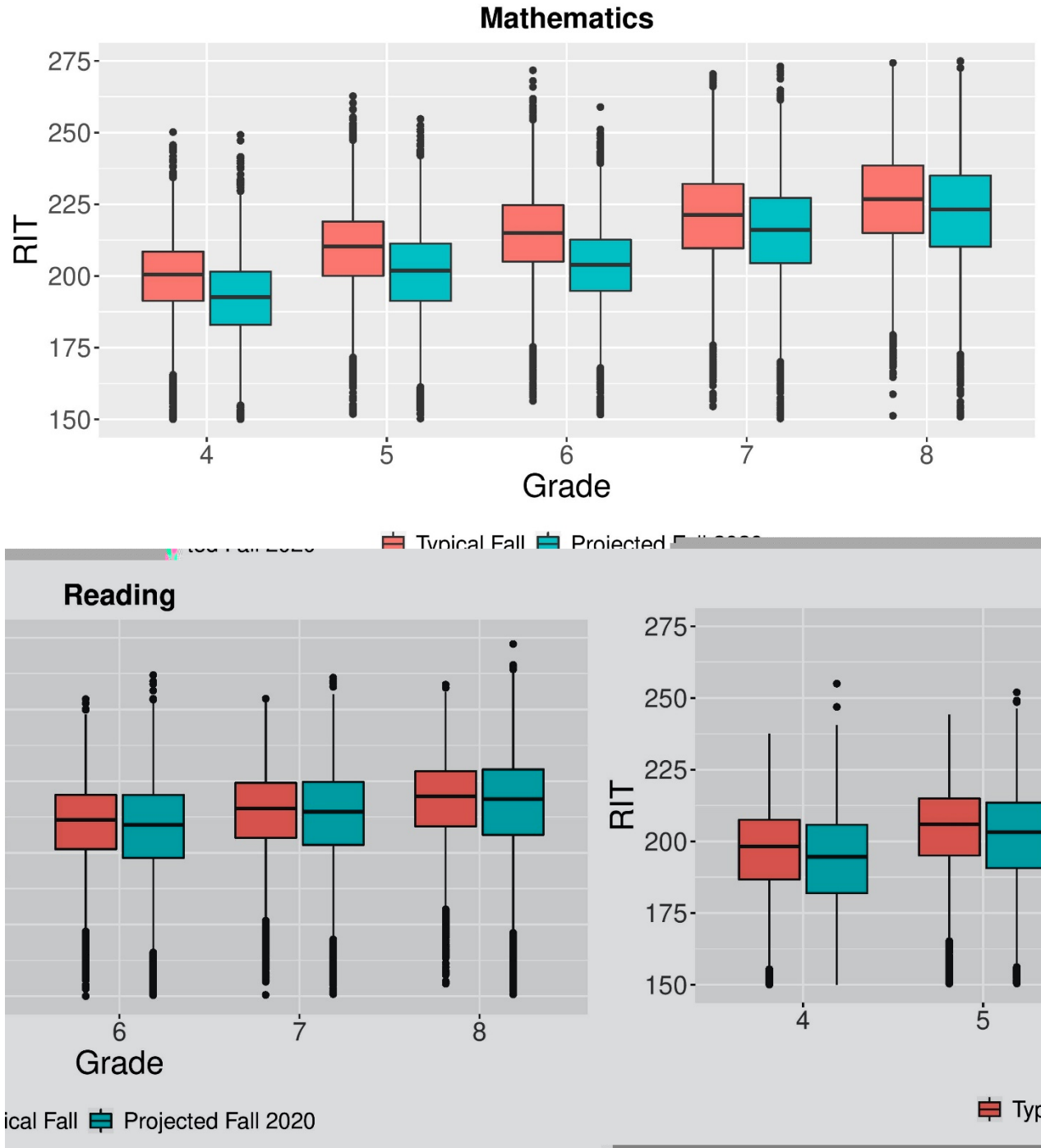


Figure 3. Projected fall 2020 score distributions under a typical fall (fall 2018) and COVID Loss Summer Slide conditions

Appendix A. Literature Review on Out-of-School Time Impacts

In Tables A1-A3, we describe the studies included and excluded from our effect size table (Table 1 in the main paper) as well as the approach taken to convert the reported estimates into a single metric (SD loss per day of school missed). These articles were identified through a combination of database searches (e.g., Google Scholar), review of cited literature within recent studies, and inquiries of experts in each area. While we tried to capture key studies in each area, this review should not be considered a full representation of the work on each topic. In selecting studies for inclusion in Table 1, we prioritized recent studies where (a) the outcome was a math or reading test score and (b) the paper had estimates that could be converted into standard deviation (SD) units. For all studies that were included in Table 1, we present both the reported estimate (in the unit of the original reported coefficient) as well as the “Calculated” estimate (units of SD loss per day of school missed), which is consistent across all included studies.

Table A1

Review of Key Summer Learning Loss Studies

| Citation | Location | Research Design | Grade Level | Calc. Math Effect | Calc. ELA Effect | Reported Math Effect | Report ELA Effect | Description of Units |
|---|---|-----------------------|------------------|-------------------|------------------|----------------------|-------------------|--|
| Included in Literature Review Table 1 | | | | | | | | |
| Atteberry & McEachin (2020) | National (NWEA - 1st to 8th grade) | Seasonal growth model | Summer after 1st | -0.009 | -0.010 | -0.19 | -0.19 | Scale of original estimate: total RIT point drop across entire summer (reported in Tables 2 and 3) Conversion: Divided estimate by 2020 spring SDs (by grade/subject) and then converted into instructional days (assuming approx. 50 weekdays during the summer) |
| | | | Summer after 2nd | -0.006 | -0.006 | -0.14 | -0.10 | |
| | | | Summer after 3rd | -0.006 | -0.005 | -0.13 | -0.08 | |
| | | | Summer after 4th | -0.005 | -0.003 | -0.11 | -0.06 | |
| | | | Summer after 5th | -0.005 | -0.003 | -0.10 | -0.06 | |
| | | | Summer after 6th | -0.003 | -0.002 | -0.06 | -0.04 | |
| | | | Summer after 7th | -0.002 | -0.001 | -0.04 | -0.02 | |
| von Hippel, Workman & Downey (2018) | National (ECLS-K:2011) | Seasonal growth model | Summer after K | 0.002 | -0.001 | 0.03 | -0.01 | Scale of original estimate: Monthly SD units (reported in Table 4) Conversion: Divided by 20 weekdays per month to get SD per day |
| | | | Summer after 1st | -0.001 | -0.001 | -0.02 | -0.02 | |
| Kuhfeld, Condron, & Downey (2019) | National (NWEA, K-8) | Seasonal growth model | Summer after K | -0.005 | -0.004 | -1.19 | -1.00 | Scale of original estimate: RIT point drop per summer month (reported in Table 2) Conversion: Divided estimate by 2020 spring SDs (by grade/subject) and then divided by 20 weekdays per month to get SD per day |
| | | | Summer after 1st | -0.007 | -0.004 | -1.89 | -1.06 | |
| | | | Summer after 3rd | -0.006 | -0.004 | -1.72 | -1.14 | |
| | | | Summer after 4th | -0.005 | -0.003 | -1.58 | -0.88 | |
| | | | Summer after 6th | -0.004 | -0.002 | -1.44 | -0.75 | |
| Summer after 7th | -0.002 | -0.001 | -0.85 | -0.41 | | | | |
| Excluded from Literature Review Table 1 | | | | | | | | |
| Cooper, Nye, Charlton, Lindsay, & Greathouse (1996) | 13 different studies | Meta-analysis | 1st-9th | N/A | N/A | -0.14 | -0.05 | Reported estimates are in SD units across the whole summer (pg. 253). This study was excluded due to measurement issues (described by von Hippel & Hamrock, 2019) in the studies reviewed. |
| Quinn, Cooc, McIntyre, & Gomez, (2016) | National (ECLS-K:2011) | Seasonal growth model | K-2nd | N/A | N/A | N/A | N/A | This study only compares race/SES differences in summer loss and does not provide overall summer drop estimates, so we did not include the results from this study in Table 1. |
| Kuhfeld (2019) | National (NWEA) | Projected test scores | K-7th | N/A | N/A | 70-78% lost ground | 62% to 73% | This paper reports the percentage of students who lost ground during the summer, which can not be translated into SD units. |
| von Hippel & Hamrock (2019) | National (ECLS-K:2011 + NWEA) and Baltimore schools | Seasonal growth model | K-8th | N/A | N/A | N/A | N/A | This study only compares race/SES differences in summer loss and does not provide overall summer drop estimates, so we did not include the results from this study in Table 1. |

Table A2

Review of Key School Closures Studies

| Citation | Location | Research Design | Grade Level | Calc. Math Effect | Calc. ELA Effect | Reported Math Effect | Reported ELA Effect | Notes |
|--|----------|--------------------------|--|-----------------------|------------------|---|---|---|
| Included in Literature Review Table 1 | | | | | | | | |
| Hansen (2011) | CO; MD | Two-sample least squares | 8th grade (CO) | -0.013 to -0.039 | N/A | .013-.039 (NS) | N/A | Scale of original estimate: SD units for every absence (reported in Table 6 on pg 36) Conversion: None necessary |
| | | | 3rd grade (MD) | -0.003 to -0.011 (NS) | | .003-.011 (NS) | | |
| | | | 5th grade (MD) | -0.015 to -0.016 | | .015-.016 | | |
| | | | 8th grade (MD) | -0.009 to -0.013 | | .009- .013 | | |
| Goodman (2014) | MA | Instrumental variables | 3rd-8th + 10th grade | -0.000 (NS) | 0.003 (NS) | -0.000 (NS) | 0.003 (NS) | Scale of original estimate: SD units for every day closed (reported as maximum plausible effect size), Column (IV) Table 6 on pg 35 Conversion: None necessary |
| Excluded from Literature Review Table 1 | | | | | | | | |
| Sacerdote (2012) | LA/TX | Difference-in-Difference | students impacted by Hurricane Katrina | N/A | N/A | initial decline of 0.1 SD, but gained back within 3 years | initial decline of 0.1 SD, then gained back | The comparison reported in this study is by "evacuee" status. The reported estimate is drop one year later on standardized test scores, which we could not convert into the SD/day metric of the other studies so it was excluded from Table 1. |
| | | | students impacted by Hurricane Rita | N/A | N/A | Initial decline of 0.08 SD, then gained slightly | initial decline of 0.06 SD, and not gained back by 2009 | The comparison reported in this study is by "evacuee" status. The reported estimate is drop one year later on standardized test scores, which we could not convert into the SD/day metric of the other studies so it was excluded from Table 1. |
| Ward, Shelley, Kaase, & Pane (2008) | MS | Means of scale scores | 3rd to 8th grade | N/A | N/A | 5-7 points | 4-7 points | The comparison reported in this study was students who were and were not "displaced" by Hurricane Katrina. We are unable to convert the mean scale score differences into SD units so it was excluded from Table 1. |

| | | | | | | | | |
|--------------------------|----|------------|-----------|-----|-----|------------------------|------------------------|---|
| Marcotte (2007) | MD | Regression | 3rd grade | N/A | N/A | -1.20% | -0.78% | The reported metric was change in % of students getting 'satisfactory' per SD increase in snow accumulation. We are unable to convert the mean scale score differences into SD units so it was excluded from Table 1. |
| | | | 5th grade | N/A | N/A | -0.93% | not sig | |
| | | | 8th grade | N/A | N/A | -0.94% | not sig | |
| Marcotte & Hemelt (2007) | MD | Regression | 3rd grade | N/A | N/A | -0.53% | -0.51% | The reported metric was change in % of students getting 'satisfactory' per day lost. We are unable to convert the mean scale score differences into SD units so it was excluded from Table 1. |
| | | | 5th grade | N/A | N/A | smaller than 3rd grade | smaller than 3rd grade | |
| | | | 8th grade | N/A | N/A | smaller than 3rd grade | half 3rd grade | |

Table A3

Review of Key Absenteeism Studies

| Citation | Location | Research Design | Grade Level | Calc. Math Effect | Calc. ELA Effect | Reported Math Effect | Report ELA Effect | Notes |
|--|--------------------------------|---|---------------|-------------------|------------------|----------------------|-------------------|--|
| Included in Literature Review Table | | | | | | | | |
| Liu, Lee, & Gershenson (2020) | large urban CA school district | Lagged-score VAM and between-subject differences | middle school | -0.008 | -0.006 | -0.077 | -0.057 | Scale of original estimate: SD units for every 10 spring absences. Math results are taken from column (5) of Table 4 and ELA results are results are taken from column (5) of Table A2. Conversion: Divided by 10 to get SD units per day |
| | | | high school | -0.009 | -0.008 | -0.085 | -0.075 | |
| Gershenson, Jackowitz, & Brannegan (2017) | ECLS-K | Value-added models | K-1st | -0.002 | -0.002 | -0.002 | -0.002 | Scale of original estimate: SD units for every absence. Results are taken from Table 4. Conversion: None necessary |
| | NC public schools | | 3rd-5th | -0.007 | -0.004 | -0.007 | -0.004 | |
| Aucejo & Romano (2016) | NC public schools | Student/School fixed effects model + Instrumental variables | 3rd – 5th | -0.006 | -0.003 | -0.0055 | -0.0029 | Scale of original estimate: SD units for every absence. Results taken from columns (5) from Table 3. Conversion: None necessary. |
| Excluded from Lit Review Table | | | | | | | | |
| Gottfried & Kirskey (2017) | small urban CA district | School and classroom fixed effects. | 3rd-5th | N/A | N/A | -0.07 | -0.03 | The reported metric is change in SD for one spring absence (pg. 124). |
| Gottfried (2011) | Philadelphia school district | Family-FE estimates | 2nd-4th grade | N/A | N/A | -0.10 | -0.08 | We are reporting the effect sizes from pg. 172 from the family fixed effects models. These results are from comparing siblings in the same family. |
| Gottfried (2009) | Philadelphia school district | Lagged test score VAM | 2nd-4th grade | N/A | N/A | -0.099 | -0.054 | We are reporting the VAM estimates (Column 8) from Table 4 and 7. |

References (in order of appearance of the table)

Summer Loss

- Atteberry, A. & McEachin, A. (2020). School's Out: The Role of Summers in Understanding Achievement Disparities. (EdWorkingPaper: 20-82). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/2mam-bp02>
- von Hippel, P. T., Workman, J., & Downey, D. B. (2018). Inequality in reading and math skills forms mainly before kindergarten: A replication, and partial correction, of “Are Schools the Great Equalizer?” *Sociology of Education*, *91*, 323–357.
- Kuhfeld, M., Condrón, D., & Downey, D. (2019). When Does Inequality Grow? A Seasonal Analysis of Racial/Ethnic Disparities in Learning in Kindergarten through Eighth Grade. (The Collaborative for Student Growth at NWEA Working Paper).
- Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, *66*(3), 227.
- Quinn, D. M., Cooc, N., McIntyre, J., & Gomez, C. J. (2016). Seasonal dynamics of academic achievement inequality by socioeconomic status and race/ethnicity: Updating and extending past research with new national data. *Educational Researcher*, *45*, 443–453.
- Kuhfeld, M. (2019). Surprising new evidence on summer learning loss. *Phi Delta Kappan*, *101* (1), 25-29.
- von Hippel, P. T., & Hamrock, C. (2019). Do test score gaps grow before, during, or between the school years? Measurement artifacts and what we can know in spite of them. *Sociological Science*, *6*, 43–80.

School Closures

- Hansen, B. (2011). *School year length and student performance: Quasi -experimental evidence*. Social Science Research Networking Paper.
- Goodman, J. (2014). *Flaking out: Student absences and snow days as disruptions of instructional time*. NBER Working paper 20221.
- Sacerdote, B. (2012). When the saints go marching out: Long-term outcomes for student evacuees from Hurricanes Katrina and Rita. *American Economic Journal: Applied Economics*, *4*(1), 109-135.
- Ward, M.E., Shelley, K., Kaase, K., & Pane, J. (2008). Hurricane Katrina: A Longitudinal Study of the Achievement and Behavior of Displaced Students, *Journal of Education for Students Placed at Risk*, *13*:2-3, 297-317
- Marcotte, D. E. (2007). Schooling and test scores: A mother-natural experiment. *Economics of Education Review*, *26*, 629-640.
- Marcotte, D. E. & Hemelt, S. W. (2007). *Unscheduled school closings and student performance*. IZA Discussion Papers, No. 2923., Institute for the Study of Labor (IAZ), Bonn.

Absenteeism

- Liu, J., Lee, M., & Gershenson, S. (2020). *The short- and long-run impacts of secondary school absences*. (EdWorkingPaper: 20-125). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/xg6s-z169>
- Gershenson, S., Jackowitz, A., & Brannegan, A. (2017). Are student absences worth the worry in US primary schools? *Education Finance and Policy, 12* (2), 137-165.
- Aucejo, E. M. & Romano, T. F. (2016) Assessing the effect of school days and absences on test score performance. *Economics of Education Review, 55*, 70-87.
- Gottfried, M. & Kirskey, J.J. (2017). “When” students miss school: The role of timing of absenteeism on students’ test performance. *Educational Researcher, 46*(3), 119–130.
- Gottfried, MA. (2011). The detrimental effects of missing school: evidence from urban siblings. *American Journal of Education, 117*(2), 147-182.
- Gottfried, M. (2009). Excused versus unexcused: How student absences in elementary school affect academic achievement. *Educational Evaluation and Policy Analysis, 31*, No. 4, 392-415.

Appendix B. Comparison of NWEA and US Public Schools

NWEA schools. We defined a NWEA school as one that tests at least 10 students in Grades 3-8 in math or reading in either 2017-18 or 2018-19. The final sample included 18,958 NWEA schools.

Population of Public Schools. We downloaded the 2017-18 Public Elementary/Secondary School Universe Survey data file from <https://nces.ed.gov/ccd/pubschuniv.asp>. We define the population of interest as the set of US operational (e.g., school status variable SY_STATUS does not indicate the school is closed or yet to be opened) public schools in the 50 states and District of Columbia serving students in grades 3-8 (based on the minimum (GSLO) and maximum (GSHI) grades offered at the school). In 2017-18, the population of interest consists of 72,075 schools. The NCES school characteristics included in our comparison include enrollment by grade, percentage of students receiving free or reduced-price lunch (TOTFRL divided by school enrollment), and percentages of the students in the school who were Hispanic, Black, and White, and Asian (HI, BL, WH and AS) divided by total enrollment, and urbanicity (NCES' LOCALE codes, collapsed into City, Suburb, Town, and Rural).

Comparison of Sample and Population. Table B1 presents the comparison between the NWEA schools and population of US public schools serving students in Grades 3-8 based on 2017-18 CCD information. The NWEA and population of schools match closely on Percent FRPL and urbanicity, but there were small differences in the percentage of students enrolled of different racial/ethnic groups. Specifically, the NWEA sample of schools has a slightly higher percentage of Black students on average (17% vs. 15% overall) and lower percentage of Hispanic students (20% vs. 24% overall).

Table B1

Characteristics of the NWEA Sample of Schools Relative to the US Population of Public Schools

| | NWEA Sample of Schools | | | Population of US Public Schools Serving Grades 3-8 | | |
|------------------|------------------------|--------|--------|--|--------|--------|
| | N | M | SD | N | M | SD |
| 3rd grade | 13,699 | 71.51 | 42.55 | 53,430 | 70.87 | 44.72 |
| 4th grade | 13,621 | 73.03 | 45.54 | 53,180 | 72.54 | 47.21 |
| 5th grade | 13,220 | 75.83 | 54.75 | 51,881 | 74.69 | 55.75 |
| 6th grade | 9,006 | 104.08 | 107.37 | 37,688 | 101.47 | 110.08 |
| 7th grade | 7,452 | 123.14 | 122.29 | 31,995 | 117.88 | 129.00 |
| 8th grade | 7,344 | 124.27 | 124.38 | 31,770 | 118.47 | 130.32 |
| Percent FRPL | 18,479 | 0.50 | 0.30 | 72,062 | 0.51 | 0.31 |
| Percent Hispanic | 18,480 | 0.20 | 0.24 | 72,063 | 0.24 | 0.27 |
| Percent Black | 18,480 | 0.17 | 0.25 | 72,063 | 0.15 | 0.23 |
| Percent White | 18,480 | 0.53 | 0.33 | 72,063 | 0.51 | 0.33 |
| Percent Asian | 18,480 | 0.04 | 0.07 | 72,063 | 0.04 | 0.09 |
| City | 18,483 | 0.29 | 0.45 | 72,075 | 0.28 | 0.45 |
| Suburb | 18,483 | 0.33 | 0.47 | 72,075 | 0.33 | 0.47 |
| Town | 18,483 | 0.11 | 0.32 | 72,075 | 0.11 | 0.32 |
| Rural | 18,483 | 0.26 | 0.44 | 72,075 | 0.28 | 0.45 |

Appendix C. Parameter Estimates from Multilevel Growth Models

Tables C1 and C2 display the random and fixed effects from the quadratic growth models for mathematics and reading, respectively. The right half of the tables show the school- and student-level correlations among the random effects. Tables C3 and C4 display the random and fixed effects from the linear growth models for mathematics and reading, respectively. These models were estimated to confirm the findings that were observed with the quadratic growth models.

Table C1

Multilevel Quadratic Growth Model Parameter Estimates for Mathematics

| Subject | Grade | Growth Term | Fixed Effect | Random Effects | | | School-level Correlation | | | | Student-level Correlation | | | |
|---------|-------|---------------------------|------------------|----------------|------------|------|--------------------------|-----------|-------|-----------|---------------------------|-----------|-------|-----------|
| | | | | School SD | Student SD | ICC | Int. | Lin. - Y1 | Sum. | Lin. - Y2 | Int. | Lin. - Y1 | Sum. | Lin. - Y2 |
| Math | 3 | Intercept | 186.24 (0.06)*** | 6.24 | 12.01 | 0.21 | 1.00 | | | | | 1.00 | | |
| Math | 3 | Linear Growth - Year 1 | 2.23 (0.01)*** | 0.33 | 0.78 | 0.15 | 0.00 | 1.00 | | | | -0.20 | 1.00 | |
| Math | 3 | Quadratic Growth - Year 1 | -0.06 (0.00)*** | | | | | | | | | | | |
| Math | 3 | Summer Drop | -1.35 (0.01)*** | 0.90 | 1.98 | 0.17 | 0.08 | -0.71 | 1.00 | | | 0.11 | -0.57 | 1.00 |
| Math | 3 | Linear Growth - Year 2 | 1.49 (0.01)*** | 0.32 | 0.76 | 0.15 | 0.17 | 0.26 | -0.31 | 1.00 | 0.08 | 0.06 | -0.42 | 1.00 |
| Math | 3 | Quadratic Growth - Year 2 | -0.01 (0.00)*** | | | | | | | | | | | |
| Math | 4 | Intercept | 198.45 (0.06)*** | 6.72 | 12.40 | 0.23 | 1.00 | | | | | 1.00 | | |
| Math | 4 | Linear Growth - Year 1 | 1.47 (0.01)*** | 0.34 | 0.77 | 0.16 | 0.20 | 1.00 | | | | -0.06 | 1.00 | |
| Math | 4 | Quadratic Growth - Year 1 | 0.00 (0.00)*** | | | | | | | | | | | |
| Math | 4 | Summer Drop | -1.45 (0.01)*** | 0.90 | 2.01 | 0.17 | -0.01 | -0.68 | 1.00 | | 0.07 | -0.57 | 1.00 | |
| Math | 4 | Linear Growth - Year 2 | 1.28 (0.01)*** | 0.34 | 0.79 | 0.16 | 0.23 | 0.32 | -0.35 | 1.00 | 0.14 | 0.08 | -0.41 | 1.00 |
| Math | 4 | Quadratic Growth - Year 2 | -0.01 (0.00)*** | | | | | | | | | | | |
| Math | 5 | Intercept | 207.66 (0.07)*** | 7.66 | 13.62 | 0.24 | 1.00 | | | | | 1.00 | | |
| Math | 5 | Linear Growth - Year 1 | 1.34 (0.01)*** | 0.36 | 0.81 | 0.17 | 0.25 | 1.00 | | | | 0.00 | 1.00 | |
| Math | 5 | Quadratic Growth - Year 1 | -0.01 (0.00)*** | | | | | | | | | | | |
| Math | 5 | Summer Drop | -2.51 (0.01)*** | 1.12 | 2.30 | 0.19 | -0.26 | -0.72 | 1.00 | | -0.19 | -0.65 | 1.00 | |
| Math | 5 | Linear Growth - Year 2 | 1.11 (0.01)*** | 0.32 | 0.76 | 0.15 | 0.19 | 0.22 | -0.29 | 1.00 | 0.15 | 0.08 | -0.41 | 1.00 |
| Math | 5 | Quadratic Growth - Year 2 | -0.01 (0.00)*** | | | | | | | | | | | |
| Math | 6 | Intercept | 211.97 (0.09)*** | 8.20 | 14.07 | 0.25 | 1.00 | | | | | 1.00 | | |
| Math | 6 | Linear Growth - Year 1 | 1.20 (0.01)*** | 0.36 | 0.80 | 0.17 | 0.17 | 1.00 | | | | -0.02 | 1.00 | |
| Math | 6 | Quadratic Growth - Year 1 | -0.02 (0.00)*** | | | | | | | | | | | |
| Math | 6 | Summer Drop | -1.04 (0.01)*** | 0.91 | 2.17 | 0.15 | -0.05 | -0.77 | 1.00 | | 0.02 | -0.58 | 1.00 | |
| Math | 6 | Linear Growth - Year 2 | 0.87 (0.01)*** | 0.31 | 0.80 | 0.13 | 0.18 | 0.34 | -0.36 | 1.00 | 0.11 | 0.07 | -0.42 | 1.00 |
| Math | 6 | Quadratic Growth - Year 2 | -0.01 (0.00)*** | | | | | | | | | | | |
| Math | 7 | Intercept | 218.30 (0.11)*** | 8.97 | 15.64 | 0.25 | 1.00 | | | | | 1.00 | | |
| Math | 7 | Linear Growth - Year 1 | 0.96 (0.01)*** | 0.35 | 0.83 | 0.15 | 0.13 | 1.00 | | | | -0.06 | 1.00 | |
| Math | 7 | Quadratic Growth - Year 1 | -0.01 (0.00)*** | | | | | | | | | | | |
| Math | 7 | Summer Drop | -0.79 (0.02)*** | 0.97 | 2.29 | 0.15 | -0.04 | -0.75 | 1.00 | | 0.00 | -0.60 | 1.00 | |
| Math | 7 | Linear Growth - Year 2 | 0.90 (0.01)*** | 0.34 | 0.85 | 0.14 | 0.14 | 0.47 | -0.55 | 1.00 | 0.13 | 0.07 | -0.43 | 1.00 |
| Math | 7 | Quadratic Growth - Year 2 | -0.02 (0.00)*** | | | | | | | | | | | |

Table C2

Multilevel Quadratic Growth Model Parameter Estimates for Reading

| Subject | Grade | Growth Term | Fixed Effect | Random Effects | | | School-level Correlation | | | | Student-level Correlation | | | |
|---------|-------|---------------------------|------------------|----------------|------------|------|--------------------------|-----------|-------|-----------|---------------------------|-----------|-------|-----------|
| | | | | School SD | Student SD | ICC | Int. | Lin. - Y1 | Sum. | Lin. - Y2 | Int. | Lin. - Y1 | Sum. | Lin. - Y2 |
| Reading | 3 | Intercept | 184.80 (0.07)*** | 7.33 | 15.56 | 0.18 | 1.00 | | | | 1.00 | | | |
| Reading | 3 | Linear Growth - Year 1 | 2.33 (0.01)*** | 0.32 | 1.03 | 0.09 | -0.21 | 1.00 | | | -0.39 | 1.00 | | |
| Reading | 3 | Quadratic Growth - Year 1 | -0.10 (0.00)*** | | | | | | | | | | | |
| Reading | 3 | Summer Drop | -0.75 (0.01)*** | 0.92 | 2.72 | 0.10 | 0.08 | -0.73 | 1.00 | | 0.15 | -0.58 | 1.00 | |
| Reading | 3 | Linear Growth - Year 2 | 1.71 (0.01)*** | 0.28 | 0.95 | 0.08 | -0.19 | 0.25 | -0.38 | 1.00 | -0.17 | 0.05 | -0.45 | 1.00 |
| Reading | 3 | Quadratic Growth - Year 2 | -0.08 (0.00)*** | | | | | | | | | | | |
| Reading | 4 | Intercept | 195.28 (0.07)*** | 7.35 | 15.18 | 0.19 | 1.00 | | | | 1.00 | | | |
| Reading | 4 | Linear Growth - Year 1 | 1.77 (0.01)*** | 0.29 | 0.96 | 0.08 | -0.23 | 1.00 | | | -0.38 | 1.00 | | |
| Reading | 4 | Quadratic Growth - Year 1 | -0.08 (0.00)*** | | | | | | | | | | | |
| Reading | 4 | Summer Drop | -0.58 (0.01)*** | 0.85 | 2.61 | 0.10 | 0.05 | -0.71 | 1.00 | | 0.15 | -0.59 | 1.00 | |
| Reading | 4 | Linear Growth - Year 2 | 1.44 (0.01)*** | 0.27 | 0.90 | 0.08 | -0.21 | 0.27 | -0.40 | 1.00 | -0.15 | 0.04 | -0.46 | 1.00 |
| Reading | 4 | Quadratic Growth - Year 2 | -0.07 (0.00)*** | | | | | | | | | | | |
| Reading | 5 | Intercept | 202.58 (0.07)*** | 7.44 | 14.87 | 0.20 | 1.00 | | | | 1.00 | | | |
| Reading | 5 | Linear Growth - Year 1 | 1.51 (0.01)*** | 0.27 | 0.93 | 0.08 | -0.27 | 1.00 | | | -0.37 | 1.00 | | |
| Reading | 5 | Quadratic Growth - Year 1 | -0.08 (0.00)*** | | | | | | | | | | | |
| Reading | 5 | Summer Drop | -0.53 (0.01)*** | 0.87 | 2.63 | 0.10 | 0.07 | -0.67 | 1.00 | | 0.14 | -0.57 | 1.00 | |
| Reading | 5 | Linear Growth - Year 2 | 1.02 (0.01)*** | 0.27 | 0.93 | 0.08 | -0.18 | 0.20 | -0.31 | 1.00 | -0.11 | 0.02 | -0.46 | 1.00 |
| Reading | 5 | Quadratic Growth - Year 2 | -0.05 (0.00)*** | | | | | | | | | | | |
| Reading | 6 | Intercept | 207.89 (0.09)*** | 7.66 | 14.90 | 0.21 | 1.00 | | | | 1.00 | | | |
| Reading | 6 | Linear Growth - Year 1 | 1.11 (0.01)*** | 0.30 | 0.96 | 0.09 | -0.22 | 1.00 | | | -0.34 | 1.00 | | |
| Reading | 6 | Quadratic Growth - Year 1 | -0.05 (0.00)*** | | | | | | | | | | | |
| Reading | 6 | Summer Drop | -0.44 (0.01)*** | 0.88 | 2.71 | 0.10 | 0.06 | -0.73 | 1.00 | | 0.12 | -0.58 | 1.00 | |
| Reading | 6 | Linear Growth - Year 2 | 0.83 (0.01)*** | 0.27 | 0.95 | 0.08 | -0.15 | 0.30 | -0.41 | 1.00 | -0.08 | 0.02 | -0.46 | 1.00 |
| Reading | 6 | Quadratic Growth - Year 2 | -0.04 (0.00)*** | | | | | | | | | | | |
| Reading | 7 | Intercept | 212.20 (0.10)*** | 7.67 | 15.04 | 0.21 | 1.00 | | | | 1.00 | | | |
| Reading | 7 | Linear Growth - Year 1 | 0.90 (0.01)*** | 0.31 | 0.99 | 0.09 | -0.22 | 1.00 | | | -0.32 | 1.00 | | |
| Reading | 7 | Quadratic Growth - Year 1 | -0.04 (0.00)*** | | | | | | | | | | | |
| Reading | 7 | Summer Drop | -0.27 (0.02)*** | 0.93 | 2.78 | 0.10 | 0.03 | -0.73 | 1.00 | | 0.09 | -0.59 | 1.00 | |
| Reading | 7 | Linear Growth - Year 2 | 0.86 (0.01)*** | 0.29 | 0.97 | 0.08 | -0.14 | 0.38 | -0.54 | 1.00 | -0.07 | 0.01 | -0.46 | 1.00 |
| Reading | 7 | Quadratic Growth - Year 2 | -0.05 (0.00)*** | | | | | | | | | | | |

Table C3

Multilevel Linear Growth Model Parameter Estimates for Mathematics

| Subject | Grade | Growth Term | Fixed Effect | Random Effects | | | School-level Correlation | | | Student-level Correlation | | | | |
|---------|-------|------------------------|------------------|----------------|------------|------|--------------------------|-----------|-------|---------------------------|-------|-----------|-------|-----------|
| | | | | School SD | Student SD | ICC | Int. | Lin. - Y1 | Sum. | Lin. - Y2 | Int. | Lin. - Y1 | Sum. | Lin. - Y2 |
| Math | 3 | Intercept | 186.91 (0.06)*** | 6.21 | 12.01 | 0.21 | 1.00 | | | | 1.00 | | | |
| Math | 3 | Linear Growth - Year 1 | 1.69 (0.00)*** | 0.33 | 0.78 | 0.15 | 0.02 | 1.00 | | | -0.20 | 1.00 | | |
| Math | 3 | Summer Drop | -1.62 (0.01)*** | 0.93 | 1.99 | 0.18 | 0.07 | -0.68 | 1.00 | | 0.11 | -0.57 | 1.00 | |
| Math | 3 | Linear Growth - Year 2 | 1.42 (0.00)*** | 0.32 | 0.76 | 0.15 | 0.18 | 0.26 | -0.30 | 1.00 | 0.08 | 0.06 | -0.42 | 1.00 |
| Math | 4 | Intercept | 198.50 (0.06)*** | 6.71 | 12.40 | 0.23 | 1.00 | | | | 1.00 | | | |
| Math | 4 | Linear Growth - Year 1 | 1.42 (0.00)*** | 0.34 | 0.77 | 0.16 | 0.20 | 1.00 | | | -0.06 | 1.00 | | |
| Math | 4 | Summer Drop | -1.45 (0.01)*** | 0.90 | 2.01 | 0.17 | -0.01 | -0.67 | 1.00 | | 0.07 | -0.57 | 1.00 | |
| Math | 4 | Linear Growth - Year 2 | 1.23 (0.00)*** | 0.34 | 0.79 | 0.16 | 0.23 | 0.32 | -0.35 | 1.00 | 0.14 | 0.08 | -0.41 | 1.00 |
| Math | 5 | Intercept | 207.75 (0.07)*** | 7.66 | 13.62 | 0.24 | 1.00 | | | | 1.00 | | | |
| Math | 5 | Linear Growth - Year 1 | 1.26 (0.00)*** | 0.36 | 0.81 | 0.17 | 0.25 | 1.00 | | | 0.00 | 1.00 | | |
| Math | 5 | Summer Drop | -2.51 (0.01)*** | 1.12 | 2.30 | 0.19 | -0.27 | -0.72 | 1.00 | | -0.19 | -0.65 | 1.00 | |
| Math | 5 | Linear Growth - Year 2 | 0.99 (0.00)*** | 0.32 | 0.76 | 0.15 | 0.20 | 0.22 | -0.29 | 1.00 | 0.15 | 0.08 | -0.41 | 1.00 |
| Math | 6 | Intercept | 212.16 (0.09)*** | 8.19 | 14.07 | 0.25 | 1.00 | | | | 1.00 | | | |
| Math | 6 | Linear Growth - Year 1 | 1.04 (0.00)*** | 0.36 | 0.80 | 0.17 | 0.18 | 1.00 | | | -0.02 | 1.00 | | |
| Math | 6 | Summer Drop | -1.10 (0.01)*** | 0.91 | 2.17 | 0.15 | -0.06 | -0.76 | 1.00 | | 0.02 | -0.58 | 1.00 | |
| Math | 6 | Linear Growth - Year 2 | 0.79 (0.00)*** | 0.31 | 0.80 | 0.13 | 0.18 | 0.34 | -0.35 | 1.00 | 0.11 | 0.07 | -0.42 | 1.00 |
| Math | 7 | Intercept | 218.46 (0.11)*** | 8.97 | 15.64 | 0.25 | 1.00 | | | | 1.00 | | | |
| Math | 7 | Linear Growth - Year 1 | 0.84 (0.00)*** | 0.34 | 0.83 | 0.15 | 0.13 | 1.00 | | | -0.06 | 1.00 | | |
| Math | 7 | Summer Drop | -0.77 (0.01)*** | 0.95 | 2.29 | 0.15 | -0.05 | -0.74 | 1.00 | | 0.00 | -0.60 | 1.00 | |
| Math | 7 | Linear Growth - Year 2 | 0.69 (0.00)*** | 0.34 | 0.85 | 0.14 | 0.14 | 0.45 | -0.54 | 1.00 | 0.13 | 0.07 | -0.43 | 1.00 |

Table C4

Multilevel Linear Growth Model Parameter Estimates for Reading

| Subject | Grade | Growth Term | Fixed Effect | Random Effects | | | School-level Correlation | | | | Student-level Correlation | | | |
|---------|-------|------------------------|------------------|----------------|------------|------|--------------------------|-----------|-------|-----------|---------------------------|-----------|-------|-----------|
| | | | | School SD | Student SD | ICC | Int. | Lin. - Y1 | Sum. | Lin. - Y2 | Int. | Lin. - Y1 | Sum. | Lin. - Y2 |
| Reading | 3 | Intercept | 185.95 (0.07)*** | 7.31 | 15.55 | 0.18 | 1.00 | | | | 1.00 | | | |
| Reading | 3 | Linear Growth - Year 1 | 1.39 (0.00)*** | 0.35 | 1.03 | 0.10 | -0.19 | 1.00 | | | -0.39 | 1.00 | | |
| Reading | 3 | Summer Drop | -0.99 (0.01)*** | 1.00 | 2.72 | 0.12 | 0.06 | -0.73 | 1.00 | | 0.15 | -0.58 | 1.00 | |
| Reading | 3 | Linear Growth - Year 2 | 0.99 (0.00)*** | 0.29 | 0.95 | 0.09 | -0.16 | 0.28 | -0.41 | 1.00 | -0.16 | 0.05 | -0.45 | 1.00 |
| Reading | 4 | Intercept | 196.18 (0.07)*** | 7.34 | 15.17 | 0.19 | 1.00 | | | | 1.00 | | | |
| Reading | 4 | Linear Growth - Year 1 | 1.02 (0.00)*** | 0.31 | 0.97 | 0.09 | -0.22 | 1.00 | | | -0.38 | 1.00 | | |
| Reading | 4 | Summer Drop | -0.74 (0.01)*** | 0.91 | 2.61 | 0.11 | 0.05 | -0.72 | 1.00 | | 0.15 | -0.59 | 1.00 | |
| Reading | 4 | Linear Growth - Year 2 | 0.79 (0.00)*** | 0.28 | 0.91 | 0.09 | -0.18 | 0.30 | -0.42 | 1.00 | -0.15 | 0.04 | -0.46 | 1.00 |
| Reading | 5 | Intercept | 203.39 (0.07)*** | 7.43 | 14.86 | 0.20 | 1.00 | | | | 1.00 | | | |
| Reading | 5 | Linear Growth - Year 1 | 0.83 (0.00)*** | 0.29 | 0.93 | 0.09 | -0.26 | 1.00 | | | -0.37 | 1.00 | | |
| Reading | 5 | Summer Drop | -0.76 (0.01)*** | 0.93 | 2.63 | 0.11 | 0.06 | -0.69 | 1.00 | | 0.14 | -0.57 | 1.00 | |
| Reading | 5 | Linear Growth - Year 2 | 0.59 (0.00)*** | 0.28 | 0.93 | 0.08 | -0.16 | 0.20 | -0.33 | 1.00 | -0.11 | 0.02 | -0.46 | 1.00 |
| Reading | 6 | Intercept | 208.44 (0.09)*** | 7.64 | 14.90 | 0.21 | 1.00 | | | | 1.00 | | | |
| Reading | 6 | Linear Growth - Year 1 | 0.65 (0.00)*** | 0.31 | 0.96 | 0.10 | -0.22 | 1.00 | | | -0.34 | 1.00 | | |
| Reading | 6 | Summer Drop | -0.56 (0.01)*** | 0.91 | 2.71 | 0.10 | 0.05 | -0.73 | 1.00 | | 0.12 | -0.58 | 1.00 | |
| Reading | 6 | Linear Growth - Year 2 | 0.48 (0.00)*** | 0.27 | 0.95 | 0.08 | -0.13 | 0.28 | -0.40 | 1.00 | -0.08 | 0.02 | -0.46 | 1.00 |
| Reading | 7 | Intercept | 212.66 (0.10)*** | 7.66 | 15.03 | 0.21 | 1.00 | | | | 1.00 | | | |
| Reading | 7 | Linear Growth - Year 1 | 0.53 (0.00)*** | 0.31 | 0.99 | 0.09 | -0.22 | 1.00 | | | -0.31 | 1.00 | | |
| Reading | 7 | Summer Drop | -0.30 (0.01)*** | 0.94 | 2.78 | 0.10 | 0.02 | -0.72 | 1.00 | | 0.09 | -0.59 | 1.00 | |
| Reading | 7 | Linear Growth - Year 2 | 0.41 (0.00)*** | 0.29 | 0.97 | 0.08 | -0.12 | 0.36 | -0.53 | 1.00 | -0.06 | 0.01 | -0.46 | 1.00 |

Appendix D. Supplemental Results

Table D1 contains (a) the predicted monthly drop in RIT scores from the absenteeism literature, (b) estimates of typical fall-spring growth across 9.5 months (based on the linear $\hat{\gamma}_{100}$ and quadratic $\hat{\gamma}_{200}$ growth parameters) and summer loss ($\hat{\gamma}_{300}$) based on parameters from quadratic growth model, (c) projected gains by the end of the school year under COVID Loss Absenteeism and COVID Loss Summer Slide (assuming students were in school for 6.5 months followed by three months of out of school time), and (d) percentage of learning gains made relative to a typical school year under the two projections. The COVID Loss Absenteeism rate was calculated by averaging the effect size estimates from the absenteeism studies in Table 1 of the paper (separately for mathematics and Reading/ELA) and converting those SD drops into RIT units using the spring RIT SDs per/grade subject in NWEA's 2020 Norms (see Thum & Kuhfeld, 2020). With the exception of 5th grade mathematics, the COVID Loss Absenteeism estimates implied larger RIT drops per month than the COVID Loss Summer Slide projections.

Projected gains by the end of the school year under typical growth, COVID Loss Absenteeism, and COVID Loss Summer Slide assumptions were calculated as follows. Assuming that students were learning at a typical rate 6.5 months out of a standard 9.5-month followed by three months of learning lost at each projected rate, the estimate gain would be

$$\begin{aligned}\widehat{\text{Gain}}_{\text{Typical},g} &= (\hat{\gamma}_{100}) * 9.5 + (\hat{\gamma}_{200}) * 9.5^2 \\ \widehat{\text{Gain}}_{\text{Absent},g} &= (\hat{\gamma}_{100}) * 6.5 + (\hat{\gamma}_{200}) * 6.5^2 + (\text{Absent}) * 3 \\ \widehat{\text{Gain}}_{\text{Summer},g} &= (\hat{\gamma}_{100}) * 6.5 + (\hat{\gamma}_{200}) * 6.5^2 + (\hat{\gamma}_{300}) * 3,\end{aligned}$$

where the *Absent* is the monthly absenteeism rate reported in Table D1 and the parameters estimates are presented in Tables C1 and C2. The percentage of learning gains made relative to a typical year is calculated by dividing the projected gains under each scenario ($\widehat{\text{Gain}}_{\text{Absent},g}$ and $\widehat{\text{Gain}}_{\text{Summer},g}$) by the typical gains ($\widehat{\text{Gain}}_{\text{Typical},g}$) estimated in each grade/subject. The percentages of learning gains made under the two scenarios (final columns of Table D1) reveal that students may be expected to show large losses, particularly in math, due to the COVID school closures.

Table D2 presents the summer loss parameter estimates (e.g., the parameter estimate $\hat{\gamma}_{300}$ and random effect SD $\sqrt{T_{St(3,3)}}$) from the multilevel growth models as well as the monthly learning rates for students at the 25th, 50th, and 75th percentiles of the summer learning distribution across grades/subjects. Additionally, we report the percentile in the summer learning distribution at which students show monthly gains rather than losses. In both mathematics and reading, there is a large amount of variability in summer learning rates. In mathematics, students in the top 20-30% of the distribution (depending on the grade) actually show monthly gains rather than losses. In reading, approximately the upper half of the distribution (39-46% of students) show gains during the summer. Based on these findings, it is clear that summer loss is

common but far from universal, and provide some evidence that we could expect that the COVID-19 extended school closures may not be associated with academic loss for all students.

As a second part of Research Question 2, we compared projected fall scores under two different scenarios based on the empirical Bayes (EB) estimates from the models fit to the 2017-18 and 2018-19 MAP Growth data. The first scenario assumes “typical” fall scores assuming student i in grade g within school j completed the prior school year and had a standard summer break:

$$\widehat{RIT}_{Typical_Fall,gij} = \hat{\gamma}_{000} + \hat{r}_{0ij} + (\hat{\gamma}_{100} + \hat{r}_{1ij}) * 9.5 + (\hat{\gamma}_{200}) * 9.5^2 + (\hat{\gamma}_{300} + \hat{r}_{3ij}) * 2.5.$$

In the second scenario, we produce COVID-19 projected fall assuming students were out of school during the last three months of the 2019-20 school year:

$$\widehat{RIT}_{COVID_Fall,gij} = \hat{\gamma}_{000} + \hat{r}_{0ij} + (\hat{\gamma}_{100} + \hat{r}_{1ij}) * 6.5 + (\hat{\gamma}_{200}) * 6.5^2 + (\hat{\gamma}_{300} + \hat{r}_{3ij}) * 5.5.$$

For each grade/subject, we calculated projected fall scores under each scenario for all of the students in the analysis. Table D3 displays the predicted means, SDs, and percentile scores (based on NWEA’s 2020 Norms) under two scenarios. We observed that the test scores under the COVID-19 projections are more variable, with SDs that are slightly larger in mathematics and close to 16-20% larger in reading as compared with SDs in a typical fall. Also, while under normal conditions this sample of students’ projected scores is close to the national norms on average (e.g., near 50th percentile in their fall scores), under the COVID-19 Summer Slide projections these students would be considered well-below average in the fall based on NWEA’s grade/subject-specific norms.

Table D1

Projected Gains Retained at the End of the 2019-20 School Year

| Grade | Subject | Absenteeism Drops per Month | 2017-18 Results (based on Quadratic Growth Model) | | | Projected Gains by the End of School Year | | Percentage of Learning Gains Made Relative to a Typical School Year | |
|-------|-------------|-----------------------------------|--|-----------------------|-----------------------------|--|----------------------------|---|----------------------------|
| | | | Fall Score | Fall-Spring Growth | Summer Drop Per Month | COVID Loss Absenteeism | COVID Loss Summer Slide | COVID Loss Absenteeism | COVID Loss Summer Slide |
| 3 | Mathematics | -1.62 | 186.24 | 15.77 | -1.35 | 7.09 | 7.91 | 45% | 50% |
| 4 | Mathematics | -1.79 | 198.45 | 13.97 | -1.45 | 4.19 | 5.21 | 30% | 37% |
| 5 | Mathematics | -1.92 | 207.66 | 11.83 | -2.01 | 2.53 | 2.26 | 21% | 19% |
| 6 | Mathematics | -2.01 | 211.97 | 9.60 | -1.04 | 0.93 | 3.84 | 10% | 40% |
| 7 | Mathematics | -2.14 | 218.30 | 8.22 | -0.79 | 0.12 | 3.45 | 1% | 42% |
| 3 | Reading | -1.14 | 184.80 | 13.11 | -0.75 | 7.50 | 8.67 | 57% | 66% |
| 4 | Reading | -1.14 | 195.28 | 9.60 | -0.58 | 4.70 | 6.39 | 49% | 67% |
| 5 | Reading | -1.12 | 202.58 | 7.13 | -0.53 | 3.08 | 4.85 | 43% | 68% |
| 6 | Reading | -1.12 | 207.89 | 6.03 | -0.44 | 1.74 | 3.78 | 29% | 63% |
| 7 | Reading | -1.15 | 212.20 | 4.94 | -0.27 | 0.72 | 3.35 | 15% | 68% |

Note. The absenteeism rate (reported in RIT points per month) is a transformation of the SD results seen in existing literature whereas the 2017-18 results presented are model-based estimates based on the quadratic model results displayed in Tables C1 and C2.

Table D2

Variability in Summer Learning Loss Estimates During Summer of 2018

| Grade | Subject | Summer Drop Fixed Effect | Summer Drop SD | Perc. at Which Students Show Gains | Monthly Learning Loss at Different Points in the Distribution | | |
|-------|-------------|--------------------------|----------------|------------------------------------|---|------------|------------|
| | | | | | 25th Perc. | 50th Perc. | 75th Perc. |
| 3 | Mathematics | -1.35 | 1.98 | 75% | -2.68 | -1.35 | -0.01 |
| 4 | Mathematics | -1.45 | 2.01 | 76% | -2.81 | -1.45 | -0.09 |
| 5 | Mathematics | -2.01 | 2.30 | 81% | -3.55 | -2.01 | -0.45 |
| 6 | Mathematics | -1.04 | 2.17 | 68% | -2.51 | -1.04 | 0.42 |
| 7 | Mathematics | -0.79 | 2.29 | 64% | -2.33 | -0.79 | 0.75 |
| 3 | Reading | -0.75 | 2.72 | 61% | -2.58 | -0.75 | 1.09 |
| 4 | Reading | -0.58 | 2.61 | 59% | -2.34 | -0.58 | 1.18 |
| 5 | Reading | -0.53 | 2.63 | 58% | -2.30 | -0.53 | 1.24 |
| 6 | Reading | -0.44 | 2.71 | 56% | -2.26 | -0.44 | 1.39 |
| 7 | Reading | -0.27 | 2.78 | 54% | -2.15 | -0.27 | 1.60 |

Note. Perc=Percentile. Reported estimates are monthly gains/losses in RIT points during the summer months. The reported percentile is the estimated percentile in which students are showing positive monthly growth rates in either reading or mathematics during the summer.

Table D3

Fall 2020 Score Projections Under "Typical" and COVID-19 Conditions

| Grade | Subject | "Typical" Fall Scores | | | COVID-19 (Summer Slide) Projected Fall Scores | | |
|-------|-------------|-----------------------|-------|-------|---|-------|-------|
| | | M | SD | Perc. | M | SD | Perc. |
| 4 | Mathematics | 199.20 | 13.90 | 0.49 | 191.32 | 15.24 | 0.28 |
| 5 | Mathematics | 209.12 | 15.30 | 0.50 | 200.53 | 16.08 | 0.29 |
| 6 | Mathematics | 214.41 | 15.59 | 0.49 | 203.04 | 15.40 | 0.23 |
| 7 | Mathematics | 220.69 | 17.27 | 0.51 | 215.10 | 17.65 | 0.38 |
| 8 | Mathematics | 226.21 | 18.46 | 0.50 | 221.76 | 18.89 | 0.43 |
| 4 | Reading | 196.13 | 15.98 | 0.49 | 191.98 | 19.06 | 0.39 |
| 5 | Reading | 203.81 | 15.63 | 0.49 | 200.82 | 18.52 | 0.41 |
| 6 | Reading | 209.70 | 15.41 | 0.49 | 207.29 | 18.37 | 0.43 |
| 7 | Reading | 213.82 | 15.58 | 0.49 | 211.96 | 18.36 | 0.45 |
| 8 | Reading | 217.64 | 15.68 | 0.49 | 216.40 | 18.27 | 0.46 |

Note. M=Mean, SD=Standard deviation, and Perc. = Percentile score under NWEA's 2020 Norms (Thum & Kuhfeld, 2020). Scores are reported for Grades 4-8 because we are tracking cohorts of students who are in Grades 3-7 in 2017-18 into the fall of 2018, so results are only reported for the subsequent grade levels (e.g., Grades 4-8).

EXHIBIT "11"

COVID-19 and student learning in the United States: The hurt could last a lifetime

June 1, 2020 | Article

By Emma Dorn, [Bryan Hancock](#), [Jimmy Sarakatsannis](#), and Ellen Viruleg

New evidence shows that the shutdowns caused by COVID-19 could exacerbate existing achievement gaps.

DOWNLOADS

[↓ Article \(PDF-605KB\)](#)

The US education system was not built to deal with extended shutdowns like those imposed by the COVID-19 pandemic. Teachers, administrators, and parents have worked hard to keep learning alive; nevertheless, these efforts are not likely to provide the quality of education that's delivered in the classroom.

Even more troubling is the context: the persistent achievement disparities across income levels and between white students and students of black and Hispanic heritage. School shutdowns could not only cause disproportionate learning losses for these students—compounding existing gaps—but also lead more of them to drop out. This could have long-term effects on these children's long-term economic well-being and on the US economy as a whole.

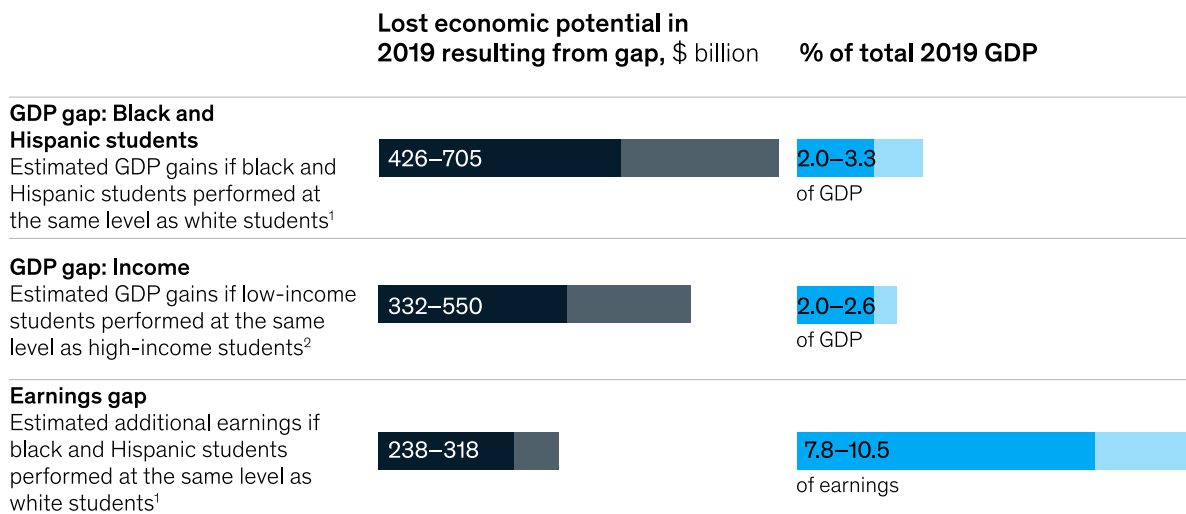
Despite the enormous attention devoted to the achievement gap, it has remained a stubborn feature of the US education system. In 2009, we estimated that the gap between white students and black and Hispanic ones deprived the US economy of \$310 billion to \$525 billion a year in productivity, equivalent to 2 to 4 percent of GDP. The achievement gap between high- and low-income students was even larger, at \$400 billion to \$670 billion, 3 to 5 percent of GDP.^[1] Although we calculate these two gaps separately, we recognize that black and Hispanic students are also more likely to live in poverty. Yet poverty alone cannot account for the gaps in educational performance. Together, they were the equivalent of a permanent economic recession.

Unfortunately, the past decade has seen little progress in narrowing these disparities. The average black or Hispanic student remains roughly two years behind the average white one, and low-income students continue to be underrepresented among top performers.^[2]

We estimate that if the black and Hispanic student-achievement gap had been closed in 2009, today's US GDP would have been \$426 billion to \$705 billion higher.^[3] If the income-achievement gap had been closed, we estimate that US GDP would have been \$332 billion to \$550 billion higher (Exhibit 1).

Exhibit 1

The US economy would be significantly larger in 2019 if it had closed achievement gaps in 2009.



¹NAEP 8th-grade math score: comparison of average scores of black and Hispanic students with white students.

²NAEP 8th-grade math score: comparison between low-income (eligible for free lunch) students and high-income students.

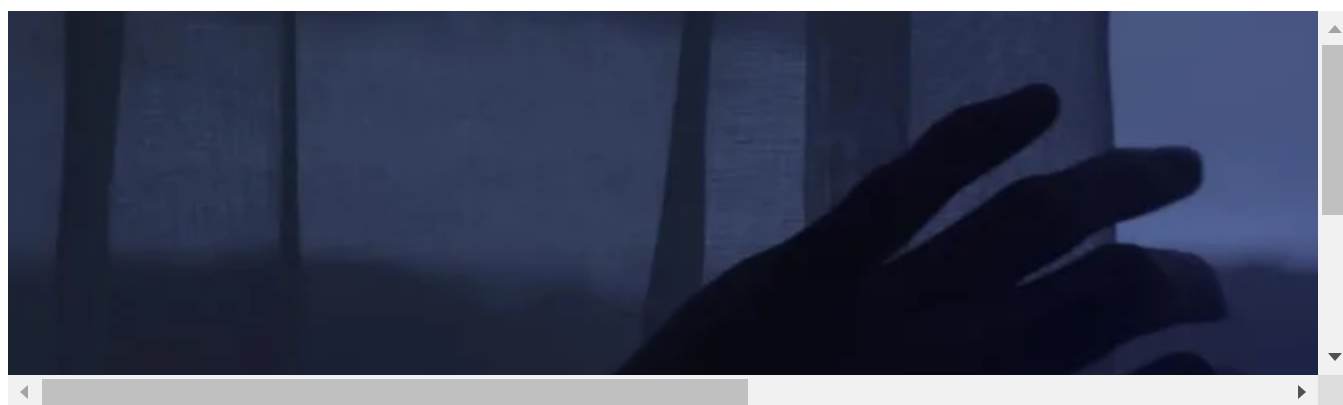
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These estimates were made before schools closed and the transition to remote learning began, sometimes chaotically. In this article, we explore the possible long-term damage of COVID-19–related school closures on low-income, black, and Hispanic Americans, and on the US economy.

Learning loss and school closures

To that end, we created statistical models to estimate the potential impact of school closures on learning. The models were based on academic studies of the effectiveness of remote learning relative to traditional classroom instruction for three different kinds of students. We then evaluated this information in the context of three different [epidemiological scenarios](#).

How much learning students lose during school closures varies significantly by access to remote learning, the quality of remote instruction, home support, and the degree of engagement. For simplicity's sake, we have grouped high-school students into three archetypes. First, there are students who experience average-quality remote learning; this group continues to progress, but at a slower pace than if they had remained in school.^[4] Second, some students are getting lower-quality remote learning; they are generally stagnating at their current grade levels. Then there are students who are not getting any instruction at all; they are probably losing significant ground. Finally, some students drop out of high school altogether.



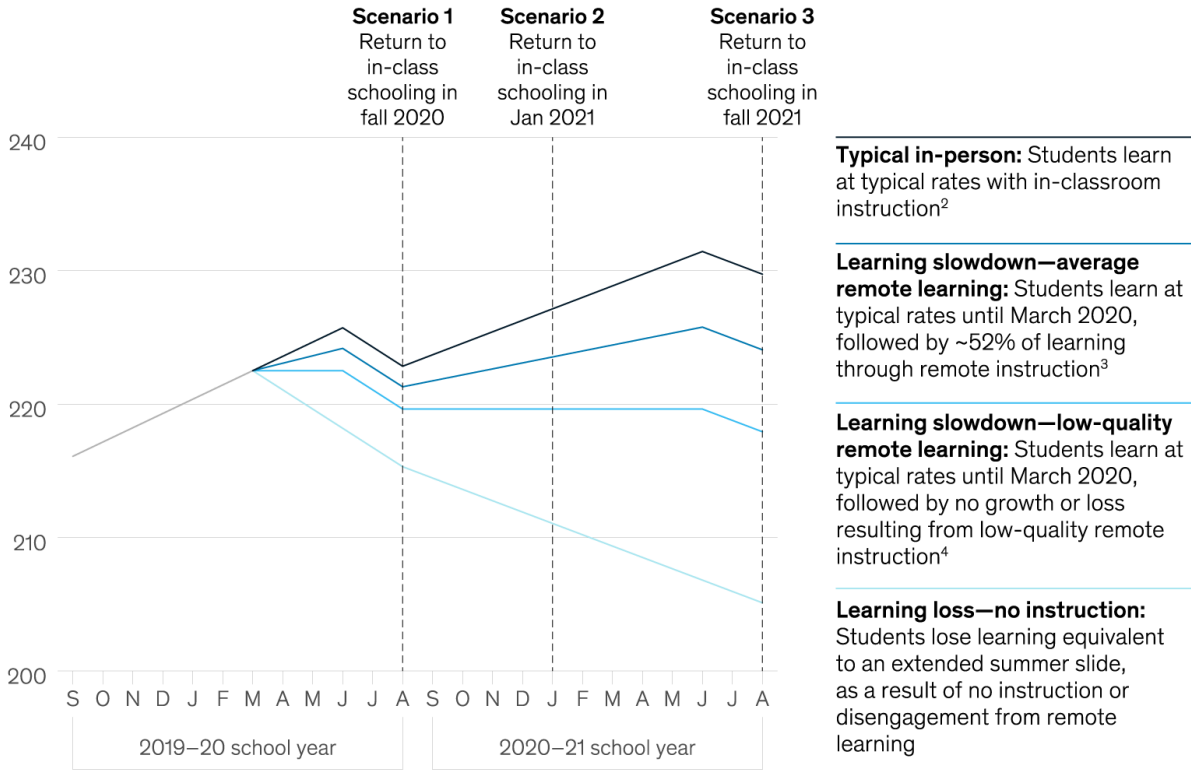
We also modeled three epidemiological scenarios. In the first—“virus contained”—in-class instruction resumes in fall 2020. In the second—“virus resurgence”— school closures and part-time schedules continue intermittently through the 2020–21 school year, and in-school instruction does not fully resume before January 2021.^[5] In the third scenario —“pandemic escalation”—the virus is not controlled until vaccines are available, and schools operate remotely for the entire 2020–21 school year.

In our second scenario (in-class instruction does not resume until January 2021), we estimate that students who remain enrolled could lose three to four months of learning if they receive average remote instruction, seven to 11 months with lower-quality remote instruction, and 12 to 14 months if they do not receive any instruction at all (Exhibit 2).

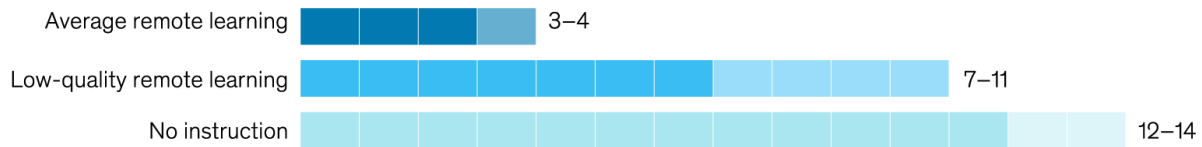
Exhibit 2

In all three scenarios, students are at risk for significant learning loss.

Projected 6th-grade math performance, example, NWEA¹ RIT Scores



Average months of learning lost in scenario 2 compared with typical in-classroom learning



¹NWEA is a K-12 assessment provider serving over 9,500 schools across the US; their RIT scores are a standardized scaled score that measures student performance and progress.

²Normal school year growth rates estimated using NWEA data.

³52% assumed growth for high-quality instruction.

⁴0% assumed average growth for low-quality instruction. Rates of learning loss may differ by student groups.

Source: Megan Kuhfeld, Dennis Condron, and Doug Downey, *When does inequality grow?*, 2019; Center for Research on Education Outcomes, Online Charter Schools Study, 2015



Although students at the best full-time virtual schools can do as well as or better than those at traditional ones,^[6] most studies have found that full-time online learning does not deliver the academic results of in-class instruction.^[7] Moreover, in 28 states,^[8] with around 48 percent of K–12 students, distance learning has not been mandated.^[9] As a result, many students may not receive any instruction until schools reopen. Even in places where distance learning is compulsory, significant numbers of students appear to be unaccounted for.^[10] In short, the hastily assembled online education currently available is likely to be both less effective, in general, than traditional schooling and to reach fewer students as well.

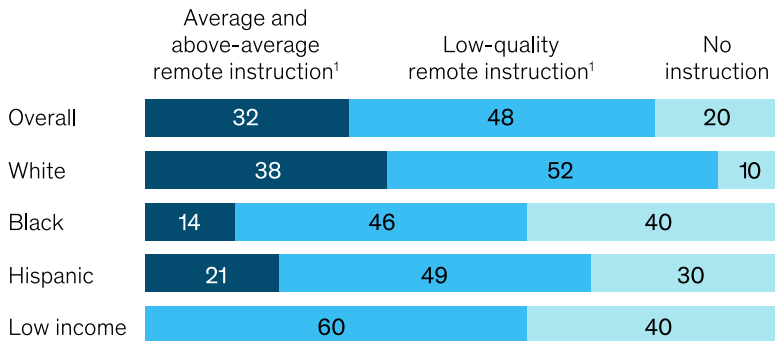
Likely effects on low-income, black, and Hispanic students

Learning loss will probably be greatest among low-income, black, and Hispanic students. Lower-income students are less likely to have access to high-quality remote learning or to a conducive learning environment, such as a quiet space with minimal distractions, devices they do not need to share, high-speed internet, and parental academic supervision.^[11] Data from Curriculum Associates, creators of the i-Ready digital-instruction and -assessment software, suggest that only 60 percent of low-income students are regularly logging into online instruction; 90 percent of high-income students do. Engagement rates are also lagging behind in schools serving predominantly black and Hispanic students; just 60 to 70 percent are logging in regularly (Exhibit 3).^[12]

Exhibit 3

Learning loss will probably be greater for low-income, black, and Hispanic students.

Quality level of remote instruction, % of K–12 students



Black, Hispanic, and low-income students are at higher risk of not receiving remote instruction of average or above-average quality ...

Average months of learning lost in scenario 2 compared with typical in-classroom learning²



... and the result is learning loss from student disengagement and/or lack of access

¹Estimates based on income quintiles, with assumption that top 2 income quintiles receive high-quality instruction.

²Includes 0.05 standard deviation reduction for black, Hispanic, and low-income students to account for recession impacts (~1 month of additional lost learning).

Source: US Census 2018

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These variations translate directly into greater learning loss.^[13] The average loss in our middle epidemiological scenario is seven months. But black students may fall behind by 10.3 months, Hispanic students by 9.2 months, and low-income students by more than a year. We estimate that this would exacerbate existing achievement gaps by 15 to 20 percent.

In addition to learning loss, COVID-19 closures will probably increase high-school drop-out rates (currently 6.5 percent for Hispanic, 5.5 percent for black, and 3.9 percent for white students, respectively). The virus is disrupting many of the supports that can help vulnerable kids stay in school: academic engagement and achievement, strong relationships with caring adults, and supportive home environments. In normal circumstances, students who miss more than ten days of school are 36 percent more likely to drop out.^[14] In the wake of school closures following natural disasters, such as Hurricane Katrina (2005) and Hurricane Maria (2017), 14 to 20 percent of students never returned to school.^[15] We estimate that an additional 2 to 9 percent of high-school students could drop out as a result of the coronavirus and associated school closures—232,000 ninth-to-11th graders (in the mildest scenario) to 1.1 million (in the worst one).^[16]

In addition to the negative effects of learning loss and drop-out rates, other, harder to quantify factors could exacerbate the situation: for example, the crisis is likely to cause social and emotional disruption by increasing social isolation and creating anxiety over the possibility that parents may lose jobs and loved ones could fall ill. Milestones such as graduation ceremonies have been canceled, along with sports and other extracurricular events. These challenges can reduce academic motivation and hurt academic performance and general levels of engagement.^[17]

The loss of learning may also extend beyond the pandemic. Given the economic damage, state budgets are already stressed. Cuts to K–12 education are likely to hit low-income and racial- and ethnic-minority students disproportionately, and that could further widen the achievement gap.^[18]

The economic impact of learning loss and dropping out

These effects—learning loss and higher dropout rates—are not likely to be temporary shocks easily erased in the next academic year. On the contrary, we believe that they may translate into long-term harm for individuals and society.

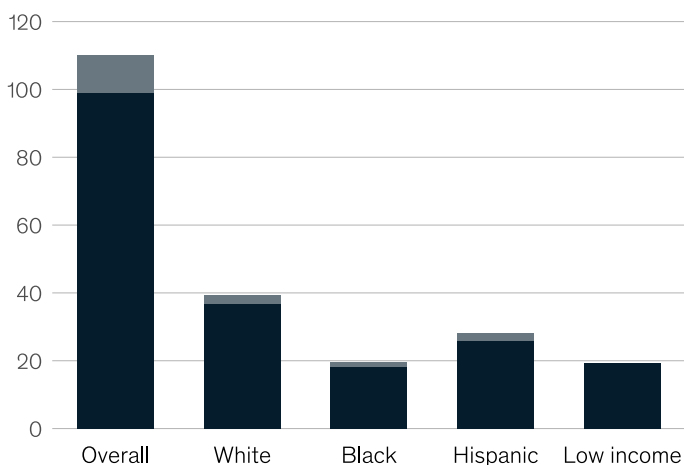
Using the middle (virus resurgence) epidemiological scenario, in which large-scale in-class instruction does not resume until January 2021, we estimated the economic impact of the learning disruption. (The results would, of course, be worse in the third scenario and better in the first.) All told, we estimate that the average K–12 student in the United States could lose \$61,000 to \$82,000 in lifetime earnings (in constant 2020 dollars), or the equivalent of a year of full-time work, solely as a result of COVID-19–related learning losses. These costs are significant—and worse for black and Hispanic Americans. While we estimate that white students would earn \$1,348 a year less (a 1.6 percent reduction) over a 40-year working life, the figure is \$2,186 a year (a 3.3 percent reduction) for black students and \$1,809 (3.0 percent) for Hispanic ones.

This translates into an estimated impact of \$110 billion annual earnings across the entire current K–12 cohort^[19] (Exhibit 4). Of that sum, \$98.8 billion would be associated with loss of learning and the rest (\$11.2 billion) with the increase in the number of high-school dropouts. This is not just an economic issue. Multiple studies have linked greater educational attainment to improved health, reduced crime and incarceration levels, and increased political participation.

Exhibit 4

Loss of learning leads to loss of earning.**Average annualized earnings loss, scenario 2, \$ billion**

■ Dropout
■ Learning loss

**Estimated effect of learning loss**

| | | | | | |
|--|-------|-------|-------|-------|-------|
| Number of students affected, million | 55.3 | 27.1 | 8.3 | 14.3 | 11.8 |
| Average annual earnings lost, \$ | 1,785 | 1,348 | 2,186 | 1,809 | 1,642 |
| Average lifetime earnings lost, % ¹ | 2.2 | 1.6 | 3.3 | 3.0 | 4.0 |

Estimated effect of higher number of dropouts

| | | | | | |
|--|--------|--------|--------|-------|----|
| Average number of high-school dropouts, thousand | 648 | 263 | 114 | 233 | NA |
| Average annual earnings lost, \$ ² | 17,218 | 10,951 | 11,879 | 9,280 | NA |
| Average lifetime earnings lost, % ¹ | 21.2 | 13.2 | 18.1 | 15.2 | NA |

¹Assumes 40-year work life with average salary in 2020 dollars, using 2% inflation and 4.4% wage growth rate, average estimate.

²Individual earnings on average over a career of 40 years.

Source: Bureau of Labor Statistics; Brookings Institute; National Center for Education Statistics; National Center for Children in Poverty

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The damage to individuals is consequential, but the consequences could go deeper: the United States as a whole could suffer measurable harm. With lower levels of learning and higher numbers of drop-outs, students affected by COVID-19 will probably be less skilled and therefore less productive than students from generations that did not experience a similar gap in learning.^[20] Furthermore, if other countries mitigate the impact of lost learning and the United States does not, this will harm US competitiveness. By 2040, most of the current K-12 cohort will be in the workforce. We estimate a GDP loss of \$173 billion to \$271 billion a year—a 0.8 to 1.3 percent hit (Exhibit 5).^[21]

Exhibit 5

The educational losses caused by COVID-19 could hurt long-term GDP growth.

Estimated impact, by scenario

| | Learning loss, months | Number of additional high-school drop-outs, thousand | GDP loss by 2040, \$ billion | Annual earnings loss, \$ billion |
|---|-----------------------|--|------------------------------|----------------------------------|
| Scenario 1: In-classroom instruction ¹ resumes by fall 2020 | 3.1 | 232 | 80–125 | 44–57 |
| Scenario 2: In-classroom instruction ¹ resumes by Jan 2021 | 6.8 | 648 | 173–271 | 96–124 |
| Scenario 3: In-classroom instruction ¹ resumes by fall 2021 | 12.4 | 1,100 | 306–483 | 169–221 |

¹Or instruction as effective as in-classroom instruction.

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A call to action

These numbers are sobering—but they are not inevitable. If the United States acts quickly and effectively, it may avoid the worst possible outcomes. But if there is a delay or a lack of commitment, COVID-19 could end up worsening existing inequities.

It is therefore urgent to intervene immediately to support vulnerable students. Many students will continue to take advantage of free learning resources, but school systems must also think creatively about how to encourage ongoing learning over the summer. Initiatives might include expanding existing summer-school programs, working with agencies that run summer camps and youth programs so that they add academics to their activities, and enlisting corporations to identify and train volunteer tutors. Tennessee, for example, is recruiting 1,000 college students to tutor kids falling behind. New York will be conducting remote summer school for 177,700 students (compared with 44,000 in 2019). Some districts are making digital summer learning available (though optional) to all students.

The necessity of continued remote learning cannot be an excuse for inaction or indifference. There are examples of high-quality online education, and reaching this level should be the general expectation. While no one knows exactly what level of in-class learning will be possible for the 2020–21 school year, many students will probably need to stay home for at least part of it. Educators need to use the summer to learn how to make instruction more effective, whatever the scenario.

Achieving this goal will make it necessary to provide teachers with resources that show them how they can make virtual engagement and instruction effective and to train them in remote-learning best practices. It will also be necessary to work with parents to help create a good learning environment at home, to call upon social and mental-health services so that students can cope with the pandemic's stresses, and to ensure that all students have the infrastructure (such as laptops, tablets, and good broadband) needed for remote learning.

As a blend of remote and in-classroom learning becomes possible, more flexible staffing models will be required, along with a clear understanding of which activities to prioritize for in-classroom instruction, identification of the students who most need it, and the flexibility to switch between different teaching methods. And all this must be done while school systems keep the most vulnerable students top of mind. That may require investment—something that cannot be taken for granted if state and local government budgets are cut.

The US academic-achievement gap was first identified in 1966. Its persistence is troubling. The possibility that COVID-19 could make it worse deserves focused attention. The achievement gap costs the United States hundreds of billions of dollars—and also exacts a long-term cost in social cohesion. This is a moment—and a challenge—that calls for urgency and energy.

1. For both 2009 and 2019, we use \$25,000 in annual income (in 2009 constant dollars) as the cutoff between low and high income.

2. Erik Hanushek, Paul E. Peterson, Laura M. Talpey, and Ludger Woessmann. *Long-run Trends in the U.S. SES-Achievement Gap*, NBER Working Paper No. 26764, National Bureau of Economic Research, February 2020; S. F. Reardon, “The widening academic achievement gap between the rich and the poor: New evidence and possible explanations,” in Greg Duncan and Richard Murnane (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*, New York: Russell Sage Foundation, 2011.
3. The learning gap has remained almost the same between 2007 (the year of the latest data when we published our 2009 report) and 2019. Black students scored, on average, 31 points lower than white students did on eighth-grade National Assessment of Education Progress (NAEP) math assessments in 2007; in 2019 they scored 32 points lower. Hispanic students scored, on average, 26 points lower than white students did on eighth-grade NAEP math assessments in 2007; in 2019 they scored 24 points lower. The increase in dollar values is the result of an increase in proportion of black and Hispanic people in the workforce and higher GDP base value in 2019.
4. High-quality remote-learning programs are typically the result careful planning and deliberate approaches—which were not typical of the COVID-19 transition.
5. For simplicity’s sake, we have equated this with schools restarting as normal in January 2021, even though the reality is more likely to be a patchwork of different actions.
6. There is evidence from online-learning providers’ internal, peer-reviewed research that some virtual-learning experiences can achieve parity with brick-and-mortar experiences for students, especially those who were struggling academically.
7. See, for example the 2015 Online Charter School Study of the Center for Research on Education Outcomes (CREDO), credo.stanford.edu.
8. Alaska, Arkansas, Colorado, Connecticut, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Missouri, Montana, New Jersey, New York, North Carolina, Ohio, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, and Wisconsin.
9. *Politics K–12*, “Coronavirus and learnings: What’s happening in each state,” blog entry by *Education Week* staff, April 3, 2020, blogs.edweek.org.
10. The Curriculum Associates analysis of anonymized data on usage from March to May 2020 of i-Ready software (a personalized learning system typically used as supplemental instruction by classroom teachers), curriculumassociates.com.
11. Many parents continue to work full-time outside their homes, so their children may not have an adult at home to supervise their learning; Brooke Auxier and Monica Anderson, “As schools close due to the coronavirus, some U.S. students face a digital ‘homework gap,’” Fact Tank, March 16, 2020, pewresearch.org. Many white-collar workers, however, are able to work remotely and thus provide at least some supervision. Dana Goldstein, Adam Popescu, and Nikole Hannah-Jones, “As school moves online, many students stay logged out,” *New York Times*, April 6, 2020, nytimes.com. Also, one in ten public school students in New York City lives in shelter housing, which can mean several children sharing a single room; Anna North, “The shift to online learning could worsen educational inequality,” *Vox*, April 9, 2020, vox.com.
12. The Curriculum Associates analysis of anonymized data on usage from March to May 2020 of i-Ready software (a personalized learning system typically used as supplemental instruction by classroom teachers), percentage of log-ins as a portion of pre-closure rates on a weekly basis, curriculumassociates.com.
13. To gauge the proportion of students that may fall into our three learning archetypes by race or ethnicity and by income level, we integrated multiple sources of information, including national surveys of teachers and data on student log-in patterns by race or ethnicity and income estimates to

generate the plausibility of the type of instruction that students may receive given the income quintiles of their families. Specifically, “No instruction” estimates based on Curriculum Associates data and press reporting, including Mark Lieberman, “Taking attendance during Coronavirus closures: Is it even worth it?”, *Education Week*, May 27, 2020, edweek.org; and Howard Blume and Sonali Kohli, “15,000 LA high-school students are AWOL online, 40,000 fail to check in daily amid coronavirus closures,” *Los Angeles Times*, March 30, 2020, latimes.com. High- and low-quality instruction estimates are based on US Census income quintiles (Income Data Tables, US Census Bureau, 2019, census.gov), with the assumption that top two income quintiles receive higher-quality instruction.

14. *Research brief: Chronic absenteeism*, Utah Education Policy Center, University of Utah, 2012, uepc.utah.edu.

15. “Declining Enrollment, Shuttered Schools,” *Education Week*, September 19, 2018, edweek.org; “Legacy of Katrina: The Impact of a Flawed Recovery on Vulnerable Children of the Gulf Coast,” National Center for Disaster Preparedness, Children’s Health Fund, 2010.

16. To create these estimates, we compared data on the effects on drop-out rates resulting from extended school absences, online-only instruction (which can disrupt engagement and student–teacher relationships), and natural disasters. We focus on grades 9 to 11, as many school districts have relaxed testing and other graduation requirements for current 12th-grade students.

17. Leah Lessard and Hannah Schacter, “Why the coronavirus crisis hits teenagers particularly hard: Developmental scientists explain,” *Education Week*, April 15, 2020, edweek.org.

18. During the 2008 recession, annual academic gains in US counties that suffered the largest shocks to employment fell 25 percent from prerecession levels. These districts disproportionately served poor and black Americans. K. Shores, K and M. P. Steinberg, *Schooling During the Great Recession: Patterns of School Spending and Student Achievement Using Population Data*, 2019.

19. Using projected learning loss onto the National Assessment of Education Progress and its relationship with the country’s GDP and earnings. In addition, in all calculations below, we have accounted for the effects of an economic recession on academic outcomes.

20. Similar effects have been noted for other generations that experienced major learning disruptions. For example, several studies have shown long-term earnings implications for students whose learning was disrupted during World War II.

21. Using Hanushek and Woessman 2008 methodology to map national per capita growth associated with decrease in academic achievement, then adding additional impact of COVID drop-outs on GDP.

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EXHIBIT "12"

The purpose of this guidance revision is to continue to support communities, local leadership in education and public health, and pediatricians collaborating with schools in creating policies for school re-entry during the coronavirus disease 2019 (COVID-19) pandemic that foster the overall health of children, adolescents, educators, staff, and communities and are based on available evidence. Along with our colleagues in the field of education, the American Academy of Pediatrics (AAP) strongly advocates for additional federal assistance to schools throughout the United States, with no restrictions regarding their plans for in-person versus virtual learning. Regardless, in places in the United States with high levels of community transmission of severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19, where in-person learning is not possible, these schools will also need more assistance, not less, to support the additional staffing needs, alternative learning sites, hybrid educational models, and child care.

Schools and school-supported programs are fundamental to child and adolescent development and well-being and provide our children and adolescents with academic instruction, either in person or virtually; social and emotional skills; safety; reliable nutrition; physical/speech therapy and mental health services; and opportunities for physical activity, among other benefits. Schools also serve as critical centers in communities by supporting adult-focused activities (such as job training, neighborhood meetings, and parenting classes) as well as ensuring safe places for children and adolescents to be while parents or guardians are working, which in turn supports the local economy.

Beyond supporting the educational development of children and adolescents, schools play a critical role in addressing racial and social inequity. As such, it is critical to reflect on the differential impact the COVID-19 pandemic and the associated school closures have had on different racial and ethnic groups and vulnerable populations. The AAP condemns the persistent racial and social inequities that exist within the US educational system. The disparities in school funding, quality of school facilities, educational staffing, and resources for enriching curriculum between schools have been exacerbated by the pandemic. Families rely on schools to provide child care; a safe, stimulating space for children to learn; opportunities for socialization; and access to school-based mental, physical, and nutritional health services. Without adequate support for families to access these services, disparities will likely worsen, especially for children who are English language learners, children with disabilities, children

living in poverty, and children of African American/Black, Latinx/Hispanic, and Native American/Alaska Native origin.i,ii

For children and adolescents in virtual learning models, educational disparities may widen further. According to the Pew Research Center, 1 in 5 teenagers are not able to complete schoolwork at home because of lack of a computer or internet connection.iii This technological “homework gap” disproportionately affects Black, Hispanic, and low-income families.3

The AAP strongly recommends that school districts promote racial/ethnic and social justice by promoting the well-being of all children in any school-reopening plan, particularly children living in marginalized communities. To address these disparities, federal, state, and local governments should allocate resources to provide equitable access to educational supports. These recommendations are provided, acknowledging that our understanding of the COVID-19 pandemic is changing rapidly.

Any school re-entry policies should consider the following key principles:

- To be able to open schools safely, it is vitally important that communities take all necessary measures to limit the spread of the SARS-CoV-2.
- School policies must be flexible and nimble in responding to new information, and administrators must be willing to refine approaches when specific policies are not working.
- Schools must take a multi-pronged, layered approach to protect students, teachers, and staff. By using different approaches, these layers of protection will make in-person learning safe and possible.
- It is critically important to develop strategies that can be revised and adapted depending on the level of viral transmission and test positivity rate throughout the community and in the schools, recognizing the differences between school districts, including urban, suburban, and rural districts.
- School districts must be in close communication and coordinate with state and/or local public health authorities, school nurses, local pediatric practitioners, and other medical experts.
- School re-entry policies should be practical, feasible, and appropriate for child and adolescent's developmental stage and address teacher and staff safety.
- Special considerations and accommodations to account for the diversity of youth should be made, especially for vulnerable populations, including those who are medically fragile or complex, live in poverty, have developmental challenges, or have

disabilities, with the goal of safe return to school. These youth and their families should work closely with their pediatrician using a shared decision-making approach regarding return to school.

- Pediatricians, families, and schools should partner together to collaboratively identify and develop accommodations when needed for any child or adolescent with unique medical needs.
 - Children and adolescents who need customized considerations should not be automatically excluded from school unless required in order to adhere to local public health mandates or because their unique medical needs would put them at increased risk for contracting COVID-19 during current conditions in their community.
- School policies should be guided by supporting the overall health and well-being of all children, adolescents, their families, and their communities but should also look to create safe working environments for educators and school staff. This focus on overall health and well-being includes addressing the behavioral/mental health needs of students and staff.
- These policies should be consistently communicated in languages other than English, if needed, based on the languages spoken in the community, to avoid marginalization of parents/guardians who are of limited English proficiency or do not speak English at all.
- Federal, state, and local funding should be provided for all schools so they can provide all the safety measures required for students and staff. Funding to support virtual learning and provide needed resources must be available for communities, schools, and children facing limitations implementing these learning modalities in their home (eg, socioeconomic disadvantages) or in the event of school re-closure because of resurgence of SARS-CoV-2 in the community or a school outbreak.

With the above principles in mind, **the AAP strongly advocates that all policy considerations for the coming school year should start with a goal of having students physically present in school.** *Unfortunately, in many parts of the United States, there is currently uncontrolled spread of SARS-CoV-2. Although the AAP strongly advocates for in-person learning for the coming school year, the current widespread circulation of the virus will not permit in-person learning to be safely accomplished in many jurisdictions.* The importance of in-person learning is well-documented, and there is already evidence of the negative impacts on children because of school closures in the spring of 2020.

Lengthy time away from school and associated interruption of supportive services often results in social isolation, making it difficult for schools to identify and address important learning deficits as well as child and adolescent physical or sexual abuse, substance use, depression, and suicidal ideation. This, in turn, places children and adolescents at considerable risk of morbidity and, in some cases, mortality. Beyond the educational impact and social impact of school closures, there has been substantial impact on food security and physical activity for children and families. The disproportionate impact this has had on Black, Latinx, and Native American/Alaskan Native children and adolescents must also be recognized.

Policy makers and school administrators must also consider the mounting evidence regarding COVID-19 in children and adolescents, including the role they may play in transmission of the infection. SARS-CoV-2 appears to behave differently in children and adolescents than other common respiratory viruses, such as influenza, on which much of the current guidance regarding school closures is based. Although children and adolescents play a major role in amplifying influenza outbreaks, to date, this does not appear to be the case with SARS-CoV-2. Although many questions remain, the preponderance of evidence indicates that children and adolescents can become infected and are less likely to be symptomatic and less likely to have severe disease resulting from SARS-CoV-2 infection.^{iv} We continue to learn more about the role children play in transmission of SARS-CoV-2. At present, it appears that children younger than 10 years may be less likely to become infected and less likely to spread infection to others, although further studies are needed.^v More recent data suggest children older than 10 years may spread SARS-CoV-2 as efficiently as adults, and this information should be part of the considerations taken in determining how to safely and effectively open schools. Additional in-depth studies are needed to truly understand the infectivity and transmissibility of this virus in anyone younger than 18 years, including children and adolescents with disabilities and medical complexities. Policies to mitigate the spread of COVID-19 within schools must be balanced with the previously noted known harms to children, adolescents, families, and the community that come with keeping children at home.

Finally, policy makers and school administrators should acknowledge that COVID-19 policies are intended to mitigate, not eliminate, risk. No single action or set of actions will completely eliminate the risk of SARS-CoV-2 transmission, but implementation of several coordinated interventions can greatly reduce that risk. For example, where physical distance cannot be maintained, students (older than 2 years) and staff should wear cloth face coverings (unless medical or developmental conditions prohibit use). In the following sections, some general principles are reviewed that policy makers and school administrators should consider as they safely plan for the coming school year. For all of these, engagement of the entire school

community, including teachers and staff, regarding these measures should begin early, ideally at least several weeks before the start of the school year.

Since this guidance was first released, there have been several other documents released by the [Centers for Disease Control and Prevention](#) (CDC), [National Association of School Nurses](#), and the [National Academy of Sciences, Engineering, and Medicine](#). All these documents are consistent regarding the importance of considering the degree to which SARS-CoV-2 is circulating in a community in making school re-opening policies. In many places in the United States at the present time, opening schools to in-person learning for all students is likely not feasible because of widespread community transmission and high levels of positivity in testing. Even in these communities, though, in-person learning should still be the goal and may be feasible as the epidemiology improves. Countries that have been able to successfully open schools have had low rates of community SARS-CoV-2 circulation. This guideline is intended to augment, not replace, guidance from the CDC and others and should be used in concert with other guidance. Ultimately, the decision to re-open schools to in-person learning should be based on the guidance of local and state public health authorities and school administrators.

Physical Distancing Measures

Physical distancing, sometimes referred to as social distancing, is simply the act of keeping people separated with the goal of limiting spread of contagion between individuals. It is fundamental to lowering the risk of spread of SARS-CoV-2, as the primary mode of transmission is through respiratory droplets by persons in close proximity. There is a conflict between optimal academic and social/emotional learning in schools and strict adherence to current physical distancing guidelines. For example, the CDC recommends that schools "space seating/desks at least 6 feet apart when feasible." In many school settings, 6 feet between students is not feasible without drastically limiting the number of students. Some countries have been able to successfully reopen schools after first controlling community-wide spread of SARS-CoV-2 while using 3 feet of distance between students without increases in community spread.vi Physical distance between desks should follow current public health guidance. In the absence of specific guidance, desks should be placed at least 3 feet apart, and ideally 6 feet apart. If desks are spaced less than 6 feet apart, face coverings should be strongly encouraged and adhere to public health guidance. In many jurisdictions, face coverings are mandatory for children in public settings, including schools. **Schools should weigh the benefits of strict adherence to a 6-foot spacing rule between students with the potential downside if remote learning is the only alternative.** Further, while these guidelines support the concept of cohorting, strict adherence to a specific size of student groups (eg, 10 per classroom, 15 per

classroom, etc) should be discouraged, because the size of cohorts will vary depending on many factors specific to individual schools and even individual classrooms.

Given what is known about SARS-CoV-2 transmission dynamics, adults within schools should maintain a distance of 6 feet from other people as much as possible, particularly around other adult staff. For all of the below settings, physical distancing by and among adults is strongly recommended, and meetings and curriculum planning should take place virtually or outside if possible. In addition, other strategies to increase adult-adult physical distance in time and space should be implemented, such as staggered drop-offs and pickups, and drop-offs and pickups outside when weather allows. Parents should, in general, be discouraged from entering the school building. Physical barriers, such as plexiglass, should be considered in reception areas and employee workspaces where the environment does not accommodate physical distancing. Congregating in shared spaces, such as staff lounge areas, should not be allowed given the increasing evidence that these types of spaces have increased rates of transmission because of close proximity and lax adherence to masking recommendations.

The recommendations in each of the age groups below are not instructional strategies but are guidance to optimize the return of students to schools in the context of physical distancing guidelines and the developmentally appropriate implementation of the strategies. Educational experts may have preference for one or another of the guidelines based on the instructional needs of the classes or schools in which they work.

Pre-Kindergarten (Pre-K)

In Pre-K, the relative impact of physical distancing among children is likely small based on current evidence, and it is certainly difficult to implement. Therefore, Pre-K program planning should focus on more effective risk mitigation strategies for this population.

These strategies include hand and cough hygiene, infection prevention education for staff and families, adult physical distancing from one another, adults and children wearing face coverings, cohorting, and spending time outdoors.

Higher-priority strategies:

- Cohort classes to minimize crossover among children and adults within the school; the exact size of the cohort may vary, often dependent on local or state health department guidance.
- Utilize outdoor spaces when possible.
- Limit unnecessary visitors into the building.

Lower-priority strategies:

- Cloth face coverings for children in the Pre-K setting
 - Encourage families to practice wearing cloth face coverings with children while at home. Support modeling by teachers and parents.
- Reducing classmate interactions/play in Pre-K–aged children may not provide substantial COVID-19 risk reduction.

Elementary Schools

Higher-priority strategies:

- Children should wear cloth face coverings
 - Practice by children and good modeling by adults will help children be more successful at wearing cloth face coverings at younger ages.
- Desks should be placed at least 3 feet apart, and ideally 6 feet apart when feasible.
 - If this reduces the amount of time children are present in school, harm may outweigh potential benefits.
- Cohort classes to minimize crossover among children and adults within the school.
- Utilize outdoor spaces when possible.

Lower-priority strategies:

- The risk reduction of reducing class sizes in elementary school-aged children may be outweighed by the challenge of doing so.
- Similarly, reducing classmate interactions/play in elementary school-aged children may not provide enough COVID-19 risk reduction to justify potential harms.

Secondary Schools

There is likely a greater impact of physical distancing on risk reduction of COVID-19 in secondary schools than early childhood or elementary education. There are also different barriers to successful implementation of many of these measures in older age groups, as the structure of

school is usually based on students changing classrooms. Suggestions for physical distancing risk mitigation strategies when feasible:

- Universal face coverings in middle and high schools, particularly when not able to maintain a 6-foot distance (students and adults).
- Planned avoidance of close physical proximity in cases of increased exhalation (singing, exercise, band); these activities are safest outdoors and spread out.
- Desks should be placed at least 3 feet apart, and ideally 6 feet apart when feasible.
- Cohort classes if possible, limit cross-over of students and teachers to the extent possible.
 - Ideas that may assist with cohorting:
 - Block schedules (with fewer classes in a given day and electives truncated to shortened time periods).
 - Eliminate use of lockers or assign them by cohort to reduce need for hallway use across multiple areas of the building.
 - This strategy would need to be implemented in conjunction with planning to ensure that students are not carrying home an unreasonable number of books on a daily basis and may vary depending on other cohorting and instructional decisions schools are making.
 - Have teachers rotate into different classrooms instead of students when feasible.
 - Utilize outdoor spaces when possible.
 - Teachers and other adult staff should maintain a distance of 6 feet from students when possible and if not disruptive to educational process.
 - Restructure elective offerings to allow small groups within one classroom. This may not be possible in a small classroom.

Special Education

Every child and adolescent with a disability is entitled to a free and appropriate education and is entitled to special education services based on their individualized education program (IEP). Students receiving special education services may be more negatively affected by distance-

learning and may be disproportionately impacted by interruptions in regular education. It may not be feasible, depending on the needs of the individual child and adolescent, to adhere both to distancing guidelines and the criteria outlined in a specific IEP. Attempts to meet physical distancing guidelines should meet the needs of the individual child and may require creative solutions, often on a case-by-case basis. Additional safety measures for teachers and staff working with students with disabilities may need to be in place to ensure optimal safety for all.

Adult Staff and Educators

- Universal cloth face coverings at all times.
- Particular avoidance of close physical proximity to other adults and children.
- Desks should be placed 6 feet away from students if feasible.
- Cohort teachers with classes if possible, limit cross-over of students and teachers to the extent possible.
 - Recognizing certain teachers must cross-over to multiple classes, such as specials teachers, special educators, and secondary school teachers.
- Use plexiglass in front and around desks particularly if unable to be 6 feet away from students.

Physical Distancing in Specific Enclosed Spaces

Buses

- Encourage alternative modes of transportation for students who have other safe options, including walking or biking.
- Ideally, for students riding the bus, symptom screening would be performed prior to them being dropped off at the bus stop.
 - Having bus drivers or monitors perform these screenings is problematic, as they may face a situation in which a student screens positive yet the parent has left, and the driver would be faced with leaving the student alone or allowing the student on the bus.

- Assigned seating; if possible, assign seats by cohort (same students sit together each day).
- Tape marks showing students where to sit.
- Face coverings should be worn at all times, particularly if 6 feet distance cannot be maintained.
- Driver should be a minimum of 6 feet from students; driver must wear face covering; consider physical barrier for driver (eg, plexiglass).
- Minimize number of people on the bus at one time *within reason*.
 - Consider altering start and end times at different grades to allow fewer students on the bus at a time.
- Adults who do not need to be on the bus should not be on the bus.
- Have windows open if weather allows.
- Ensure adequate cleaning of buses between uses.

Hallways

- Consider creating one-way hallways to reduce close contact.
- Place physical guides, such as tape, on floors or sidewalks to create one-way routes.
- Where feasible, keep students in the classroom and rotate teachers instead.
- Stagger class periods by cohorts for movement between classrooms if students must move between classrooms to limit the number of students in the hallway when changing classrooms.
- Assign lockers by cohort or eliminate lockers altogether.

Playgrounds

Enforcing physical distancing in an outside playground is difficult and may not be the most effective method of risk mitigation. Emphasis should be placed on maintaining classroom cohorts of students and limiting the size of groups participating in playground time (eg, mixing of cohorts). Outdoor transmission of virus is known to be much lower than indoor transmission. If playground equipment is being used, it should be part of cleaning plans implemented by schools.

Meals/Cafeteria

School meals play an important part in addressing food security for children and adolescents and, as was observed in the early stages of the pandemic, were crucial sources of food and nutrition to children, adolescents, and their families. Regardless of whether children are participating in in-person or distance learning, school districts must continue to provide food security to all students. This may require enacting strong policies and procedures to ensure access to all students. Decisions about how to serve meals must take into account the fact that in many communities there may be more students eligible for free and reduced meals than prior to the pandemic.

- Consider having students cohorted, potentially in their classrooms, especially if students remain in their classroom throughout the day.
- Create separate lunch periods to minimize the number of students in the cafeteria at one time.
- Use unused or underutilized spaces for lunch/break times.
- Use outdoor spaces when possible.
- Create an environment that is as safe as possible from exposure to food allergens.
- Encourage children and adults to wash their hands or use hand sanitizer before and after eating.

Face Coverings and Personal Protective Equipment (PPE)

Cloth face coverings protect others if the wearer is infected with SARS-CoV-2 and is not aware. Cloth face coverings may offer some level of protection for the wearer. Evidence continues to mount on the importance of universal face coverings in interrupting the spread of SARS-CoV-2.vii,viii,ix Universal face covering use in schools for children older than 2 years is recommended. **It is important to note many children, even those with medical conditions, are able to safely and effectively wear face coverings with adequate practice and support as well as modeling from adults.** School staff and older students (those who attend middle or high school) should be able to wear cloth face coverings safely and consistently and should be encouraged to do so. Children younger than 2 years and anyone who has trouble breathing or is unconscious,

incapacitated, or otherwise unable to remove a face covering without assistance should not wear cloth face coverings.

For certain populations, the use of cloth face coverings by teachers may impede the education process. These include students who are deaf or hard of hearing, students receiving speech/language services, young students in early education programs, and English language learners. Although there are products (eg, face coverings with clear panels in the front) to facilitate their use among these populations, these products may not be available in all settings.

Students and families should be taught how to properly wear (cover nose and mouth) a cloth face covering, to maintain hand hygiene when removing for meals and physical activity, and to replace and maintain (wash daily) a cloth face covering.

School health staff should be provided with appropriate medical PPE to use in health suites. This PPE should include universal N95 masks, surgical masks, gloves, disposable gowns, and face shields or other eye protection. School health staff should be aware of the [CDC guidance on infection control measures](#). [Asthma treatments using inhalers with spacers](#) should be used rather than nebulizer treatments whenever possible, because nebulizer treatments are aerosol-generating procedures, which increase risks to others. The [CDC recommends](#) that nebulizer treatments at school should be reserved for children who cannot use or do not have access to an inhaler (with spacer or spacer with mask) for a respiratory emergency. Schools should work with families and health care providers to assist with obtaining an inhaler and spacer for students with limited access. In addition, schools should work to develop and implement asthma action plans, which may include directly observed controller medication administration in schools to promote optimal asthma control. In those rare cases in which a student can only use a nebulizer, school health staff should [wear gloves, an N95 facemask \(when available\), gown, and eye protection](#). Staff should be trained on proper donning and doffing procedures and follow the [CDC guidance](#) regarding precautions when performing this aerosol-generating procedure. Nebulizer treatments should be performed in a space that limits exposure to others and with minimal staff present. Rooms should be well-ventilated, or treatments should be performed outside. After the use of the nebulizer, the room should undergo routine [cleaning and disinfection](#).

School staff working with students who are unable to wear a cloth face covering or who are unable to manage secretions and who must be in close proximity to these students should wear a surgical mask in combination with a face shield.

Cleaning and Disinfection

The main mode of COVID-19 spread is from person to person, primarily via droplet transmission. For this reason, strategies for infection prevention should center around this form of spread, including physical distancing, face coverings, and hand hygiene. Given the challenges that may exist in children and adolescents effectively adhering to recommendations, it is critical that staff consistently set a good example for students by modeling behaviors around physical distancing, face coverings, and hand hygiene. Infection via fomites is less likely. However, because the virus may survive on certain surfaces for some time, it is possible to get infected after touching a virus contaminated surface and then touching the mouth, eyes, or nose. Frequent handwashing as a modality of containment is vital.

The additional cleaning requirements because of the COVID-19 pandemic will require additional resources for schools both in supplies and potential in staffing. Cleaning should be performed per established protocols followed by disinfection when appropriate. Normal cleaning with soap and water decreases the viral load and optimizes the efficacy of disinfectants. When using disinfectants, the manufacturers' instructions must be followed, including duration of dwell time, use of PPE if indicated, and proper ventilation. The use of the Environmental Protection Agency (EPA)-approved disinfectants against COVID-19 is recommended ([EPA List N](#)). When possible, only products labeled as [safe for humans and the environment](#) (eg, Safer or Designed for the Environment), containing active ingredients such as hydrogen peroxide, ethanol, citric acid, should be selected from this list, because they are less toxic, are not strong respiratory irritants or asthma triggers, and have no known carcinogenic, reproductive, or developmental effects.

When EPA-approved disinfectants are not available, alternative disinfectants such as diluted bleach or 70% alcohol solutions can be used. Children should not be present when disinfectants are in use and should not participate in disinfecting activities. Most of these products are not safe for use by children, whose "hand-to-mouth" behaviors and frequent touching of their face and eyes put them at higher risk for toxic exposures. If disinfection is needed while children are in the classroom, adequate ventilation should be in place and nonirritating products should be used. Disinfectants such as bleach and those containing quaternary ammonium compounds or "Quats" should not be used when children and adolescents are present, because these are known respiratory irritants.

In general, elimination of high-touch surfaces is preferable to frequent cleaning. For example, classroom doors can be left open rather than having students open the door when entering and leaving the classroom, or the door can be closed once all students have entered followed by hand sanitizing. As part of increasing social distance between students and surfaces requiring regular cleaning, schools could also consider eliminating the use of lockers, particularly if

they are located in shared spaces or hallways, making physical distancing more challenging. If schools decide to use this strategy, it should be done within the context of ensuring that students are not forced to transport unreasonable numbers of books back and forth from school on a regular basis.

When elimination of use of high-touch surfaces is not possible, surfaces that are used frequently, such as drinking fountains, door handles, sinks and faucet handles, etc, should be cleaned and disinfected at least daily and as often as possible. Bathrooms, in particular, should receive frequent cleaning and disinfection. Shared equipment including computer equipment, keyboards, art supplies, and play or gym equipment should also be disinfected frequently. Hand washing should be promoted before and after touching shared equipment. Computer keyboard covers can be used to facilitate cleaning between users. [Routine cleaning practices](#) should be used for indoor areas that have not been used for 7 or more days or outdoor equipment. Surfaces that are not high-touch, such as bookcases, cabinets, wall boards, or drapes should be cleaned following standard protocol. The same applies to floors or carpeted areas.

Outdoor playgrounds/natural play areas only need routine maintenance, and hand hygiene should be emphasized before and after use of these spaces. Outdoor play equipment with high-touch surfaces, such as railings, handles, etc, should be cleaned and disinfected regularly if used continuously.

Alternative Disinfection Methods

The efficacy of [alternative disinfection methods](#), such as ultrasonic waves, high-intensity UV radiation, and LED blue light against COVID-19 virus is not known. The EPA does not routinely review the safety or efficacy of pesticidal devices, such as UV lights, LED lights, or ultrasonic devices. Therefore, the EPA cannot confirm whether, or under what circumstances, such products might be effective against the spread of SARS-CoV-2.x

Testing and Screening

Virologic testing is an important part of the overall public health strategy to limit the spread of COVID-19. Virologic testing detects the viral RNA from a respiratory (usually nasal) swab specimen. [The CDC does not recommend universal testing of students and staff](#). Testing all students for acute SARS-CoV-2 infection prior to the start of school is not feasible in most settings at this time. Even in places where this is possible, it is not clear that such testing would reduce the likelihood of spread within schools. It is important to recognize that virologic testing only shows whether a person is infected at that specific moment in time. It is also possible that

the nasal swab virologic test result can be negative during the early incubation period of the infection. So, although a negative virologic test result is reassuring, it does not mean that the student or school staff member is not going to subsequently develop COVID-19. Stated another way, a student who is negative for COVID-19 on the first day of school may not remain negative throughout the school year.

A student or school staff member who has had a known exposure to COVID-19 (eg, close contact—within 6 feet for at least 15 minutes—with an individual with laboratory-confirmed SARS-CoV-2 infection or illness consistent with COVID-19), according to [CDC guidelines](#), should self-quarantine for 14 days from the last exposure. In every case, local health officials should make the determination on quarantine and contact tracing. However, depending on current community viral case rates, local health authorities may make differing recommendations regarding contact tracing and/or school exclusion or school closure.

Another type of testing is serologic blood testing for antibodies to SARS-CoV-2. At the current time, serologic testing should not be used for individual decision-making and has no place in considerations for entrance to or exclusion from school. [CDC guidance](#) regarding antibody testing for COVID-19 is that serologic test results should not be used to make decisions about grouping people residing in or being admitted to congregate settings, such as schools, dormitories, or correctional facilities. Additionally, serologic test results should not be used to make decisions about returning people to the workplace. The CDC states that serologic testing should not be used to determine immune status in individuals until the presence, durability, and duration of immunity is established. The AAP recommends this guidance be applied to school settings as well.

Schools should have a policy regarding symptom screening for teachers and staff and what to do if a student or school staff member becomes sick with symptoms. Temperature checks and symptom screening are a frequent part of many reopening processes to identify symptomatic persons to exclude them from entering buildings and business establishments. The list of symptoms of COVID-19 infection has grown since the start of the pandemic and the manifestations of COVID-19 infection in children, although similar, is often not the same as that for adults. **First and foremost, parents should be instructed to keep their child at home if they are ill, and staff members should stay home if they are ill.** Any student or staff member with a fever of 100.4 degrees or greater or symptoms of possible COVID-19 virus infection should not be present in school. **School policies regarding temperature screening and temperature checks must balance the practicality of performing these screening procedures for large numbers of students and staff with the information known about how children manifest and transmit COVID-19 infection, the risk of transmission in schools, and the possible lost**

instructional time to conduct the screenings. At this time, the [CDC currently does not recommend universally screening students](#) at school, because screening may fail to identify a student who has a SARS-CoV-2 infection and may overidentify students with different common childhood illnesses. Schools should develop plans for rapid response to a student or staff member with fever who is in the school regardless of the implementation of temperature checks or symptom screening prior to entering the school building.

In lieu of temperature checks and symptom screening being performed after arrival to school, **methods to allow parent performing and reporting of symptoms and temperature checks performed at home may be considered.** Resources and time may necessitate this strategy at most schools. The epidemiology of disease in children along with evidence of the utility of temperature screenings in health systems may further justify this approach. Procedures using texting apps, phone systems, or online reporting rely on parent report and may be most practical but possibly unreliable, depending on individual family's ability to use these communication processes, especially if not made available in their primary language or lack of electronic forms of communication. School nurses or nurse aides should be equipped to measure temperatures for any student or staff member who may become ill during the school day and should have an identified area to separate or [isolate students](#) who may have COVID-19 symptoms.

COVID-19 manifests similarly to other respiratory illness in children. Although children manifest many of the same symptoms of COVID-19 infection as adults, some differences are noteworthy. [According to the CDC](#), children may be less likely to have fever, may be less likely to present with fever as an initial symptom, and may have only gastrointestinal tract symptoms. A student or staff member excluded because of symptoms of COVID-19 should contact their health care provider to discuss testing and medical care. In the absence of testing, students or staff should follow local health department guidance for exclusion.

Ventilation

The primary mode of transmission of SARS-CoV-2 appears to be by droplet transmission by people in close proximity. There are emerging studies on the possible role of airborne transmission. Although it is possible that there may be this type of transmission in some settings, the preponderance of evidence at this time suggests that this is not a primary mode of transmission. For example, the reproductive number of SARS-CoV-2 is in the range of other viruses known to be transmitted primarily by respiratory droplets, such as influenza. Further, simple face masks appear to be quite effective for decreasing the likelihood of transmission of

SARS-CoV-2, in contrast with known airborne pathogens such as measles. With this in mind, mitigation efforts should focus on prevention of droplet transmission. Proper ventilation, however, does have a role in preventing the spread of any respiratory pathogen. Heating, air conditioning, and ventilation (HVAC) systems should be inspected for optimal functioning, filters should be within their service life, and MERV-13 (minimum efficiency reporting value) efficiency filtration should be used, if the equipment allows.^{xi,xii} Demand-controlled ventilation (DVC) should be disabled when possible, and the system should run continuously to improve air exchanges in the school building.

Other Considerations

On-site School-Based Health Services

On-site school health services, including school-based health centers, should be supported if available, to complement the pediatric medical home and to provide pediatric acute, chronic, and preventive care. Collaboration with [school nurses](#) will be essential, and school districts should involve school health services staff early in the planning phase for reopening and consider collaborative strategies that address and prioritize immunizations and other needed health services for students, including behavioral health, vision screening, hearing, and reproductive health services.

Vision Screening

Vision screening practices should continue in school whenever possible. Vision screening serves to identify children who may otherwise have no outward symptoms of blurred vision or subtle ocular abnormalities that, if untreated, may lead to permanent vision loss or impaired academic performance in school. Personal prevention practices and environmental [cleaning and disinfection](#) are important principles to follow during vision screening, along with any additional guidelines from local health authorities.

Hearing Screening

Safe hearing screening practices should continue in schools whenever possible. School screening programs for hearing are critical in identifying children who have hearing loss as soon as possible so that reversible causes can be treated and hearing restored. Children with permanent or progressive hearing loss will be habilitated with hearing aids to prevent impaired academic performance in the future. Personal prevention practices and environmental [cleaning and](#)

[disinfection](#) are important principles to follow during hearing screening, along with any additional guidelines from local health authorities.

Education

The impacts of lost instructional time and social emotional development on children and adolescents should be anticipated, and schools will need to be prepared to adjust curricula and instructional practices accordingly without the expectation that all lost academic progress can be caught up. Plans to make up for lost academic progress because of school closures and distress associated with lost academic progress and the pandemic in general should be balanced by a recognition of the likely continued distress of educators and students that will persist when schools reopen. If the academic expectations are unrealistic, school will likely become a source of further distress for students (and educators) at a time when they need additional support. It is also critical to maintain a balanced curriculum with continued physical education and other learning experiences rather than an exclusive emphasis on core subject areas. In addition, continued improvement of remote learning practices should be encouraged, and further funding should be provided by federal and local governments to provide further support (eg, universal free broadband internet).

Students with Disabilities

The impact of loss of instructional time and related services, including mental health services as well as occupational, physical, and speech/language therapy during the period of school closures is significant for students with disabilities. All students, but especially those with disabilities, may have more difficulty with the social and emotional aspects of transitioning out of and back into the school setting. As schools prepare for reopening, school personnel should develop a plan to ensure a review of each child and adolescent with an IEP to determine the needs for compensatory education to adjust for lost instructional time as well as other related services. In addition, schools can expect a backlog in evaluations; therefore, plans to prioritize those for new referrals as opposed to re-evaluations will be important. Many school districts require adequate instructional effort before determining eligibility for special education services. However, virtual instruction or lack of instruction should not be reasons to avoid starting services such as response-to-intervention (RTI) services, even if a final eligibility determination is postponed.

Behavioral Health/Emotional Support for Children and Adolescents

Schools should anticipate and be prepared to address a wide range of mental health needs of children and staff when schools reopen. Preparation for [infection control](#) is vital and admittedly complex during an evolving pandemic. But the emotional impact of the pandemic, grief because of loss, financial/employment concerns, social isolation, and growing concerns about systemic racial inequity — coupled with prolonged limited access to critical school-based mental health services and the support and assistance of school professionals — demands careful attention and planning as well. Schools should be prepared to adopt an approach for mental health support, and just like other areas, supporting mental health will require additional funding to ensure adequate staffing and the training of those staff to address the needs of the students and staff in the schools.

Schools should consider providing training to classroom teachers and other educators on how to talk to and support children during and after the COVID-19 pandemic. Students requiring mental health support should be referred to school mental health professionals.

Suicide is the second leading cause of death among adolescents or youth 10 to 24 years of age in the United States. In the event distance learning is needed, schools should develop mechanisms to evaluate youth remotely if concerns are voiced by educators or family members and should be establishing policies, including referral mechanisms for students believed to be in need of in-person evaluation, even before schools reopen.

School mental health professionals should be involved in shaping messages to students and families about the response to the pandemic. Fear-based messages widely used to encourage strict physical distancing may cause problems when schools reopen, because the risk of exposure to COVID-19 may be mitigated but not eliminated. Communicating effectively is especially critical, given potential adaptations in plans for in-person or distance learning that need to occur during the school year because of changes in community transmission of SARS-CoV-2.

When schools do reopen, plans should already be in place for outreach to families whose students do not return for various reasons. This outreach is especially critical, given the high likelihood of separation anxiety and agoraphobia in students. Students may have difficulty with the social and emotional aspects of transitioning back into the school setting, especially given the unfamiliarity with the changed school environment and experience. Special considerations are warranted for students with pre-existing anxiety, depression, and other mental health conditions; children with a prior history of trauma or loss; and students in early education who may be particularly sensitive to disruptions in routine and caregivers. Students facing other challenges, such as poverty, food

insecurity, and homelessness, and those subjected to ongoing racial inequities may benefit from additional support and assistance.

Schools need to incorporate academic accommodations and supports for all students who may still be having difficulty concentrating or learning new information because of stress or family situations that are compounded by the pandemic. It is important that school personnel do not anticipate or attempt to catch up for lost academic time through accelerating curriculum delivery at a time when students and educators may find it difficult to even return to baseline rates. These expectations should be communicated to educators, students, and family members so that school does not become a source of further distress.

Mental Health of Staff

The personal impact on educators and other school staff should be recognized. In the same way that students are going to need support to effectively return to school and to be prepared to be ready to process the information they are being taught, teachers cannot be expected to be successful at teaching children without having their mental health needs supported. The strain on teachers this year as they have been asked to teach differently while they support their own needs and those of their families has been significant, and they will be bringing that stress back to school as schools reopen. Resources such as Employee Assistance Programs and other means to provide support and mental health services should be established prior to reopening. The individual needs and concerns of school professionals should be addressed with accommodations made as needed (eg, for a classroom educator who is pregnant, has a medical condition that confers a higher risk of serious illness with COVID-19, resides with a family member who is at higher risk, or has a mental health condition that compromises the ability to cope with the additional stress).

Although schools should be prepared to be agile to meet evolving needs and respond to increasing knowledge related to the pandemic and may need to institute partial or complete closures when the public health need requires, school leaders should recognize that staff, students, and families will benefit from sufficient time to understand and adjust to changes in routine and practices. During a crisis, people benefit from clear and regular communication from a trusted source of information and the opportunity to dialogue about concerns and needs and feel they are able to contribute in some way to the decision-making process. Change is more difficult in the context of crisis and when predictability is already severely compromised.

Food Insecurity

In 2018, 11.8 million children and adolescents (1 in 7) in the United States lived in a food-insecure household.^{xiii} The coronavirus pandemic has led to increased unemployment and poverty for America's families, which will likely increase even further the number of families who experience food insecurity.^{xiv} School re-entry planning must consider the many children and adolescents who experience food insecurity already (especially at-risk and low-income populations) and who will have limited access to routine meals through the school district if schools remain closed. The short- and long-term effects of food insecurity in children and adolescents are profound.^{xv} In the early months of the pandemic, many families were not able to pick up the food provided through schools despite the school's attempt to reach all families. Given low participation in pick-up food programs this spring in some school districts, school districts should coordinate meal delivery in accessible locations and consider providing multiple days' worth of meals to reduce the burden on families. **Plans should be made prior to the start of the school year for how students participating in free- and reduced- meal programs will receive food in the event of a school closure or if they are excluded from school because of illness or SARS-CoV-2 infection.**

Immunizations

Existing school immunization requirements should be maintained and not deferred because of the current pandemic. In addition, **although influenza vaccination is generally not required for school attendance, in the coming academic year, it should be highly encouraged for all students and staff.** The symptoms of influenza and SARS-CoV-2 infection are similar and taking steps to prevent influenza will decrease the incidence of disease in schools, and the related lost educational time and resources needed to handle such situations by school personnel and families. School districts should consider requiring influenza vaccination for all staff members.

Pediatricians should work with schools and local public health authorities to promote childhood vaccination messaging well before the start of the school year. It is vital that all children receive recommend vaccinations on time and get caught up if they are behind as a result of the pandemic. The capacity of the health care system to support increased demand for vaccinations should be addressed through a multifaceted collaborative and coordinated approach among all child-serving agencies including schools.

Organized Activities

It is likely that sporting events, practices, and conditioning sessions as well as other extracurricular activities will be limited in many locations. The [AAP Interim Guidance on Return to Sports](#) helps pediatricians inform families on how best to ensure safety when considering a

return to sports participation. Preparticipation evaluations should be conducted in alignment with the [AAP Preparticipation Physical Evaluation Monograph, 5th ed](#), and state and local guidance.

Resources

- [Coalition to Support Grieving Students](#)
- [Using Social Stories to Support People with I/DD During the COVID-19 Emergency](#)
- [Social Stories for Young and Old on COVID-19](#)

Additional Information

- [AAP Guidance Related to Childcare During COVID-19](#)
- [AAP Guidance on Providing Pediatric Well-Care During COVID-19](#)
- [AAP Guidance on Cloth Face Coverings](#)
- [AAP Guidance on Testing](#)
- [AAP Guidance on Use of Personal Protective Equipment \(PPE\)](#)
- [COVID-19 Interim Guidance: Return to Sports](#)
- Information for Parents on HealthyChildren.org: [Returning to School During COVID-19](#)
- [List of latest AAP News articles](#) on COVID-19
- [Pediatrics COVID-19 Collection](#)
- [AAP COVID-19 Advocacy Resources](#) (Login required)
- [Centers for Disease Control and Prevention: Considerations for Schools](#)
- [Centers for Disease Control and Prevention: School Decision Tree](#)
- [Centers for Disease Control and Prevention: Parent Decision Making Tool](#)
- [Centers for Disease Control and Prevention: Activities and Initiatives Supporting the COVID Response](#)
- [Centers for Disease Control Schools and Childcare - Plan, Prepare, & Respond](#)
- [Centers for Disease Control and Prevention: Information for Pediatric Healthcare Providers](#)

References

- [1] Levinson M, Cevik M, Lipsitch M. Reopening primary schools during the pandemic. *N Engl J Med*. July 29, 2020. Available at: <https://www.nejm.org/doi/full/10.1056/NEJMms2024920?query=TOC>.
- [2] National Academies of Sciences, Engineering, and Medicine 2020. *Reopening K-12 Schools During the COVID-19 Pandemic: Prioritizing Health, Equity, and Communities*. Washington, DC: The National Academies Press; 2020. Available at: <https://doi.org/10.17226/25858>.
- [3] Pew Research Center. As schools close due to the coronavirus, some U.S. students face a digital 'homework gap'. March 16, 2020. Available at: <https://www.pewresearch.org/fact-tank/2020/03/16/as-schools-close-due-to-the-coronavirus-some-u-s-students-face-a-digital-homework-gap/>
- [4] Kaiser Family Foundation. What Do We Know About Children and Coronavirus Transmission? July 29, 2020. Available at: <https://www.kff.org/coronavirus-covid-19/issue-brief/what-do-we-know-about-children-and-coronavirus-transmission/>
- [5] Park YJ, Choe YJ, Park O, et al. Contact tracing during coronavirus disease outbreak, South Korea, 2020. *Emerg Infect Dis*. 2020;26(10). Available at: <https://doi.org/10.3201/eid2610.201315>
- [6] Melnick H, Darling-Hammond L, Leung M, et al. Reopening schools in the context of COVID-19: Health and safety guidelines from other countries (policy brief). Palo Alto, CA: Learning Policy Institute; 2020. Available at: <https://learningpolicyinstitute.org/product/reopening-schools-covid-19-brief>
- [7] Rodriguez-Palacios A, Cominelli F, Basson AR, Pizarro TT, Ilic S. Textile masks and surface covers-a spray simulation method and a "universal droplet reduction model" against respiratory pandemics. Published 2020 May 27. *Front Med (Lausanne)*. 2020;7:260. Available at: [doi:10.3389/fmed.2020.00260](https://doi.org/10.3389/fmed.2020.00260)
- [8] World Health Organization. Advice on the use of masks in the context of COVID-19. June 2020. Available at: https://apps.who.int/iris/bitstream/handle/10665/332293/WHO-2019-nCov-IPC_Masks-2020.4-eng.pdf?sequence=1&isAllowed=y
- [9] Centers for Disease Control and Prevention. Use of Masks to Help Slow the Spread of COVID-19. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>
- [10] Centers for Disease Control and Prevention. Cleaning and Disinfecting Your Facility. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

[11] American Academy of Pediatrics, Council on School Health. Schools. In: Etzel RA, Balk SJ, eds. *Pediatric Environmental Health*. 4th ed: Itasca, IL: American Academy of Pediatrics; 2019: 163-187

[12] US Environmental Protection Agency. Supports Healthy Indoor Environments in Schools During COVID-19 Pandemic. Available at: <https://www.epa.gov/iaq-schools/epa-supports-healthy-indoor-environments-schools-during-covid-19-pandemic>

[13] Coleman-Jensen A, Rabbit MP, Gregory CA, Singh A. Household Food Security in the United States in 2018. Economic Research Report No. (ERR-270). Washington, DC: US Department of Agriculture Economic Research Service; September 2019. Available at: <https://www.ers.usda.gov/publications/pub-details/?pubid=94848>

[14] Dunn CG, Kenney E, Fleischhacker SE, Bleich SN. Feeding low-income children during the Covid-19 pandemic. *N Engl J Med*. 2020;382:e40. Available at: <https://www.nejm.org/doi/full/10.1056/NEJMp2005638>

[15] American Academy of Pediatrics, Council on Community Pediatrics and Committee on Nutrition. Promoting food security for all children. *Pediatrics*. 2015;136(5):e1431-e1438. Available at: <https://doi.org/10.1542/peds.2015-3301>.

Interim Guidance Disclaimer: The COVID-19 clinical interim guidance provided here has been updated based on current evidence and information available at the time of publishing. Guidance will be regularly reviewed with regards to the evolving nature of the pandemic and emerging evidence. All interim guidance will be presumed to expire in December 2020 unless otherwise specified.

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EXHIBIT "13"

Coronavirus Disease 2019 (COVID-19)

The Importance of Reopening America's Schools this Fall

Importance of Reopening Schools

[MENU >](#)

Updated July 23, 2020

[Print](#)

As families and policymakers make decisions about their children returning to school, it is important to consider the full spectrum of benefits and risks of both in-person and virtual learning options. Parents are understandably concerned about the safety of their children at school in the wake of COVID-19. The best available evidence indicates if children become infected, they are far less likely to suffer severe symptoms.^{[1],[2],[3]} Death rates among school-aged children are much lower than among adults. At the same time, the harms attributed to closed schools on the social, emotional, and behavioral health, economic well-being, and academic achievement of children, in both the short- and long-term, are well-known and significant. Further, the lack of in-person educational options disproportionately harms low-income and minority children and those living with disabilities. These students are far less likely to have access to private instruction and care and far more likely to rely on key school-supported resources like food programs, special education services, counseling, and after-school programs to meet basic developmental needs.^[4]

Aside from a child's home, no other setting has more influence on a child's health and well-being than their school. The in-person school environment does the following:

- provides educational instruction;
- supports the development of social and emotional skills;
- creates a safe environment for learning;
- addresses nutritional needs; and
- facilitates physical activity.

This paper discusses each of these critical functions, following a brief summary of current studies regarding COVID-19 and children.

COVID-19 and Children

The best available evidence indicates that COVID-19 poses relatively low risks to school-aged children. Children appear to be at lower risk for contracting COVID-19 compared to adults. To put this in perspective, according to the Centers for Disease Control and Prevention (CDC), as of July 17, 2020, the United States reported that children and adolescents under 18 years old account for under 7 percent of COVID-19 cases and less than 0.1 percent of COVID-19-related deaths.^[5] Although relatively rare, flu-related deaths in children occur every year. From 2004-2005 to 2018-2019, flu-related deaths in children reported to CDC during regular flu seasons ranged from 37 to 187 deaths. During the H1N1 pandemic (April 15, 2009 to October 2, 2010), 358 pediatric deaths were reported to CDC. So far in this pandemic, deaths of children are less than in each of the last five flu seasons, with only 64.[†] Additionally, some children with certain underlying medical conditions, however, are at increased risk of severe illness from COVID-19.*

Scientific studies suggest that COVID-19 transmission among children in schools may be low. International studies that have assessed how readily COVID-19 spreads in schools also reveal low rates of transmission when community transmission is low. Based on current data, the rate of infection among younger school children, and from students to teachers, has been low, especially if proper precautions are followed. There have also been few reports of children being the primary source of COVID-19 transmission among family members.^{[6],[7],[8]} This is consistent with data from both virus and antibody testing, suggesting that children are not the primary drivers of COVID-19 spread in schools or in the community.^{[9],[10],[11]} No studies are conclusive, but the available evidence provides reason to believe that in-person schooling is in the best interest of students, particularly in the context of appropriate mitigation measures similar to those implemented at essential workplaces.

Educational Instruction

Extended school closure is harmful to children. It can lead to severe learning loss, and the need for in-person instruction is particularly important for students with heightened behavioral needs.^{[12],[13]} Following the wave of school closures in March 2020 due to COVID-19, academic learning slowed for most children and stopped for some. A survey of 477 school districts by the University of Washington's Center on Reinventing Public Education found that, "far too many schools are leaving learning to chance."^[13] Just one in three school districts expected teachers to provide instruction, track student engagement, or monitor academic progress for all students, and wealthy school districts were twice as likely to have such expectations compared to low-income districts.^[13]

We also know that, for many students, long breaks from in-person education are harmful to student learning. For example, the effects of summer breaks from in-person schooling on academic progress, known as "summer slide," are also well-documented in the literature. According to the Northwest Evaluation Association, in the summer following third grade, students lose nearly 20 percent of their school-year gains in reading and 27 percent of their school-year gains in math.^[14] By the summer after seventh grade, students lose on average 39 percent of their school-year gains in reading and 50 percent of their school-year gains in math.^[14] This indicates that learning losses are large and become even more severe as a student progresses through school. The prospect of losing several months of schooling, compared to the few weeks of summer vacation, due to school closure likely only makes the learning loss even more severe.

Disparities in educational outcomes caused by school closures are a particular concern for low-income and minority students and students with disabilities. Many low-income families do not have the capacity to facilitate distance learning (e.g. limited or no computer access, limited or no internet access), and may have to rely on school-based services that support their child's academic success. A study by researchers at Brown and Harvard Universities assessed how 800,000 students used Zearn, an online math program, both before and after schools closed in March 2020.^[15] Data showed that through late April, student progress in math decreased by about half, with the negative impact more pronounced in low-income zip codes.^[15] Persistent achievement gaps that already existed before COVID-19, such as disparities across income levels and races, can worsen and cause serious, hard-to-repair damage to children's education outcomes.^{[15],[16]} Finally, remote learning makes absorbing information more difficult for students with disabilities, developmental delays, or other cognitive disabilities. In particular, students who are deaf, hard of hearing, have low vision, are blind, or have other learning disorders (e.g., attention deficit hyperactivity disorder (ADHD)) and other physical and mental disabilities have had significant difficulties with remote learning.^[17]

Social and Emotional Skill Development

Schools play a critical role in supporting the whole child, not just their academic achievement. In addition to a structure for learning, schools provide a stable and secure environment for developing social skills and peer relationships. Social interaction at school among children in grades PK-12 is particularly important for the development of language, communication, social, emotional, and interpersonal skills.^[18]

Extended school closures are harmful to children's development of social and emotional skills. Important social interactions that facilitate the development of critical social and emotional skills are greatly curtailed or limited when students are not physically in school. In an in-person school environment, children more easily learn how to develop and maintain friendships, how to behave in groups, and how to interact and form relationships with people outside of their family. In school, students are also able to access support systems needed to recognize and manage emotions, set and achieve positive goals, appreciate others' perspectives, and make responsible decisions. This helps reinforce children's feelings of school connectedness, or their belief that teachers and other adults at school care about them and their well-being. Such routine in-person contacts provide opportunities to facilitate social-emotional development that are difficult, if not impossible, to replicate through distance learning.^{[18],[19],[20]}

Additionally, extended closures can be harmful to children's mental health and can increase the likelihood that children engage in unhealthy behaviors. An environment where students feel safe and connected, such as a school, is associated with lower levels of depression, thoughts about suicide, social anxiety, and sexual activity, as well as higher levels of self-esteem and more adaptive use of free time.^{[19],[20]} A longitudinal study of 476 adolescents over 3 years starting in the 6th grade found school connectedness to be especially protective for those who had lower connectedness in other areas of their lives, such as home, and to reduce their likelihood of substance use.^[20]

Further, a review of studies conducted on pandemics found a strong association between length of quarantine and Post Traumatic Stress Disorder symptoms, avoidance behavior, and anger. Another review published this year found that post-traumatic stress scores of children and parents in quarantine were four times higher than those not quarantined.^{[21],[22]}

In-person schooling provides children with access to a variety of mental health and social services, including speech language therapy, and physical or occupational therapy to help the physical, psychological, and academic well-being of the child.^{[23],[24],[25],[26]} Further, school counselors are trained in the mental health needs of children and youth and can recognize signs of trauma that primary caregivers are less able to see because they themselves are experiencing the same family stresses. School counselors can then coordinate with teachers to implement interventions to offer children a reassuring environment for regaining the sense of order, security, and normalcy.

Without in-person schooling, many children can lose access to these important services. For example, we know that, even outside the context of school closures, children often do not receive the mental health treatment they need. Among children ages 9-17, it is estimated that 21 percent, or more than 14 million children, experience some type of mental health condition.^[27] Yet only 16 percent of those with a condition receive any treatment.^[23] Of those, 70-80 percent received such care in a school setting.^[23] School closures can be particularly damaging for the 7.4 million American children suffering from a serious emotional disturbance. For those individuals who have a diagnosable mental, behavioral or emotional condition that substantially interferes with or limits their social functioning, schools play an integral role in linking them to care and necessary support services.

For children with intellectual or physical disabilities, nearly all therapies and services are received through schools. These vital services are difficult to provide through distance learning models. As a result, more children with disabilities have received few to no services while schools have been closed.

Safety

Extended school closures deprive children who live in unsafe homes and neighborhoods of an important layer of protection from neglect as well as physical, sexual, and emotional maltreatment and abuse. A 2018 Department of Health and Human Services report found that teachers and other educational staff were responsible for more than one-fifth of all reported child abuse cases—more than any other category of reporter.^[28] During the COVID-19 school closures, however, there has been a sharp decline in reports of suspected maltreatment, but tragically a notable increase in evidence of abuse when children are seen for services. For example, the Washington, D.C. Child and Family Services Agency recorded a 62 percent decrease in child abuse reporting calls between mid-March and April 2020 compared to the same time period in 2019, but saw more severe presentation of child abuse cases in emergency rooms.^[29] Children who live in a home or neighborhood where neglect, violence, or abuse occur, but who are not physically in school, are deprived of access to trained school professionals who can readily identify the signs of trauma and provide needed support and guidance.^{[30],[31],[32],[33],[34]}

Nutrition

Extended school closures can be harmful to the nutritional health of children. Schools are essential to meeting the nutritional needs of children with many consuming up to half their daily calories at school. Nationwide more than 30 million children participate in the National School Lunch Program and nearly 15 million participate in the School Breakfast Program.^{[35],[36]} For children from low-income families, school meals are an especially critical source of affordable, healthy foods. While schools have implemented strategies to continue meal services throughout periods of school closures, it is difficult to maintain this type of school nutrition program over the long-term. This is a particularly severe problem for the estimated 11 million food-insecure children, living in the United States.

Physical Activity

When schools are closed, children lose access to important opportunities for physical activity. Many children may not be sufficiently physically active outside of the context of in-school physical education (PE) and other school-based activities. Beyond PE, with schools closed, children may not have sufficient opportunities to participate in organized and safe physical activity. They also lose access to other school-based physical activities, including recess, classroom engagements, and after school programs.

The loss of opportunities for physical activity from school closures, especially when coupled with potentially diminished nutrition, can be particularly harmful to children. Physical inactivity and poor nutrition among children are major risk factors

for childhood obesity and other chronic health conditions. Over 75 percent of children and adolescents in the United States do not meet the daily physical activity level recommendations (60 minutes or more), and nearly half exceed 2 hours per day in sedentary behavior. Current models estimate that childhood obesity rate may increase by 2.4 percent if school closures continue to December 2020.^{[37],[38],[39]}



Conclusion













Schools are an important part of the infrastructure of our communities, as they provide safe, supportive learning environments for students, employ teachers and other staff, and enable parents, guardians, and caregivers to work. Schools also provide critical services that help meet the needs of children and families, especially those who are disadvantaged, through supporting the development of social and emotional skills, creating a safe environment for learning, identifying and addressing neglect and abuse, fulfilling nutritional needs, and facilitating physical activity. School closure disrupts the delivery of in-person instruction and critical services to children and families, which has negative individual and societal ramifications. The best available evidence from countries that have opened schools indicates that COVID-19 poses low risks to school-aged children, at least in areas with low community transmission, and suggests that children are unlikely to be major drivers of the spread of the virus. Reopening schools creates opportunity to invest in the education, well-being, and future of one of America's greatest assets—our children—while taking every precaution to protect students, teachers, staff and all their families.


*Some children have developed multisystem inflammatory syndrome (MIS-C) after exposure to SARS-CoV-2 (the virus that causes COVID-19). (<https://www.cdc.gov/mis-c/cases/index.html>) In one targeted surveillance study for MIS-C associated with SARS-CoV-2, however, the majority of children who were hospitalized with COVID-related MIS-C (70 percent) had recovered by the end date of the study period. (Feldstein LR et al.. Multisystem Inflammatory Syndrome in US Children and Adolescents. *N Engl J Med*. 2020;10.1056/NEJMoa2021680)

†CDC COVID Data Tracker. Available at <https://www.cdc.gov/covid-data-tracker/>. Accessed on July 21, 2020.

References

1. Zhen-Dong Y, Gao-Jun Z, Run-Ming J, et al. Clinical and transmission dynamics characteristics of 406 children with coronavirus disease 2019 in China: A review [published online ahead of print, 2020 Apr 28]. *J Infect*. 2020;S0163-4453(20)30241-3. doi:10.1016/j.jinf.2020.04.030
2. Choi S-H, Kim HW, Kang J-M, et al. Epidemiology and clinical features of coronavirus disease 2019 in children. *Clinical and experimental pediatrics* 2020;63(4):125-32. doi: <https://dx.doi.org/10.3345/cep.2020.00535> 
3. Coronavirus Disease 2019 in Children — United States, February 12–April 2, 2020. *Morb Mortal Wkly Rep*. 2020;69:422–426.
4. Armitage R, Nellums LB. Considering inequalities in the school closure response to COVID-19. *Lancet Glob Health*. 2020;8(5):e644. doi:10.1016/S2214-109X(20)30116-9
5. CDC COVID Data Tracker. Available at <https://www.cdc.gov/covid-data-tracker/>. Accessed on July 23, 2020.
6. National-Centre-for-immunization-research-and-surveillance. COVID-19 in schools—the experience in NSW, April 26, 2020. Accessed 07/08/2020. Available at: http://ncirs.org.au/sites/default/files/2020-04/NCIRS%20NSW%20Schools%20COVID_Summary_FINAL%20public_26%20April%202020.pdf
7. Ludvigsson JF. Children are unlikely to be the main drivers of the COVID-19 pandemic – A systematic review [published online ahead of print, 2020 May 19]. *Acta Paediatr*. 2020;10.1111/apa.15371. doi:10.1111/apa.15371
8. Danis K, Epaulard O, Benet T, et al. Cluster of coronavirus disease 2019 (Covid-19) in the French Alps, 2020. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America* 2020 doi: <https://dx.doi.org/10.1093/cid/ciaa424> 
9. World Health Organization (WHO). Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). 16–24 February 2020. Accessed 07/10/2020. Available at: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>
10. Children and COVID-19. National Institute for Public Health and the Environment, Ministry of Health, Welfare and Sport, The Netherlands. Accessed 07/08/2020. Available at: <https://www.rivm.nl/en/novel-coronavirus-covid-19/children-and-covid-19>
11. Gudbjartsson DF, Helgason A, Jonsson H, et al. Spread of SARS-CoV-2 in the Icelandic Population. *N Engl J Med*. 2020;382(24):2302-2315. doi:10.1056/NEJMoa2006100
12. Dorn E, Hancock B, Sarakatsannis J, Viruleg E. COVID-19 and student learning in the United States: the hurt could last a lifetime. Retrieved July 4, 2020, from <https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and->

- student-learning-in-the-united-states-the-hurt-could-last-a-lifetime.
13. Gross, Bethany (2020) Center for Reinventing Public Education. Too Many Schools leave Learning to Chance During the Pandemic. <https://www.crpe.org/publications/too-many-schools-leave-learning-chance-during-pandemic> Assessed on July 8, 2020.
 14. <https://www.nwea.org/blog/2018/summer-learning-loss-what-we-know-what-were-learning/> 
 15. Chetty, Friedman, Hendren, Stepner, and the Opportunity Insights Team. How Did COVID-19 and Stabilization Policies Affect Spending and Employment? A New Real-Time Economic Tracker Based on Private Sector Data. Opportunity Insights. June 17, 2020. https://opportunityinsights.org/wp-content/uploads/2020/05/tracker_paper.pdf
 16. Dorn E, Hancock B, Sarakatsannis J, Viruleg E. COVID-19 and student learning in the United States: the hurt could last a lifetime. Retrieved July 4, 2020, from <https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime>.
 17. S. Department of Education, Office of Elementary and Secondary Education, Consolidated State Performance Report, 2017–18. See Digest of Education Statistics 2019.
 18. Collaborative for Academic, Social, and Emotional Learning (CASEL). What is SEL? Website. <https://casel.org/what-is-sel/>  .
 19. Foster, C. E., Horwitz, A., Thomas, A., Opperman, K., Gipson, P., Burnside, A., Stone, D. M., & King, C. A. (2017). Connectedness to family, school, peers, and community in socially vulnerable adolescents. *Children and youth services review*, 81, 321–331. <https://doi.org/10.1016/j.childyouth.2017.08.011>
 20. Loukas A, Roalson LA, & Herrera DE (2010). School connectedness buffers the effects of negative family relations and poor effortful control on early adolescent conduct problems. *Journal of Research on Adolescence*, 20(1), 13–22
 21. Fegert JM, Vitiello B, Plener PL, and Clemens V. Challenges and Burden of the Coronavirus 2019 (COVID-19) Pandemic for Child and Adolescent Mental Health: A Narrative Review to Highlight Clinical and Research Needs in the Acute Phase and the Long Return to Normality. *Child Adolesc Psychiatry Ment Health*. 2020 May 12;14:20.
 22. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. 2020;395(10227):912–920. doi: 10.1016/S0140-6736(20)30460-8.
 23. Burns BJ, Costello EJ, Angold A, Tweed D et al. Children's Mental Health Service Use Across Service Sectors, *Health Affairs*, Vol. 14, No. 3, 1995: 149-159.
 24. Return to School During COVID-19, American Academy of Pediatrics, Healthy Children website: <https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Return-to-School-During-COVID-19.aspx>, Last updated 7/8/2020.
 25. Constantino J, Sahin M, Piven J, Rodgers R, and Tschida J. The Impact of COVID-19 on Individuals with Intellectual and Developmental Disabilities: Clinical and Scientific Priorities. *Am J Psychiatry*, submitted.
 26. Turk MA, Landes SD, Formica MK, and Goss KD: Intellectual and developmental disability and COVID-19 case-fatality trends: TriNetX analysis. *Disability and Health Journal*. 2020 May 22; [e-pub ahead of print] doi.org/10.1016/j.dhjo.2020.100942.
 27. US DHHS. Mental Health: A Report of the Surgeon General, Executive Summary. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, NIH, NIMH, 1999.
 28. Department of Health and Human Services (2018) Child Maltreatment 2018 <https://www.acf.hhs.gov/sites/default/files/cb/cm2018.pdf>  
 29. WUSA (2020) Child abuse is likely going to underreported during the coronavirus pandemic. Here's what you can do to help. <https://www.wusa9.com/article/news/health/coronavirus/child-abuse-going-underreported-due-to-coronavirus-schools-being-out-maryland-dc-virginia/65-a04a5ecb-b91f-4f11-9421-56cf46972a89>  Assessed on July 8, 2020.
 30. Baron, E. Jason and Goldstein, Ezra G. and Wallace, Cullen, Suffering in Silence: How COVID-19 School Closures Inhibit the Reporting of Child Maltreatment (May 14, 2020). Available at SSRN: <https://ssrn.com/abstract=3601399>  or <http://dx.doi.org/10.2139/ssrn.3601399> 
 31. Child Welfare Information Gateway. (2019.) Child maltreatment 2017: Summary of key findings. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau.
 32. Campbell, A. (2020). An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives. *Forensic Science International: Reports*, 2020 Apr 12. doi: 10.1016/j.fsir.2020.100089
 33. <https://pediatrics.aappublications.org/content/pediatrics/125/5/1094.full.pdf>  
 34. <https://www.acf.hhs.gov/sites/default/files/cb/cm2017.pdf>  
 35. <https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/national-school-lunch-program/> 

-
36. <https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/school-breakfast-program/> 
37. Terry-McElrath, Y. M., O'Malley, P. M., & Johnston, L. D. (2015). Foods and beverages offered in US public secondary schools through the National School Lunch Program from 2011 – 2013: early evidence of improved nutrition and reduced disparities. *Preventive Medicine*, 78, 52-58.
38. Johnson, D. B., Podrabsky, M., Rocha, A., & Otten, J. J. (2016). Effect of the Healthy Hunger-Free Kids Act on the nutritional quality of meals selected by students and school lunch participation rates. *JAMA Pediatrics*, 170(1), e15391.
39. An, R. "Projecting the impact of the coronavirus disease-19 pandemic on childhood obesity in the United States: A microsimulation model. *Science*. 2020

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Abstract

We analyzed reports for 59,073 contacts of 5,706 coronavirus disease (COVID-19) index patients reported in South Korea during January 20–March 27, 2020. Of 10,592 household contacts, 11.8% had COVID-19. Of 48,481 nonhousehold contacts, 1.9% had COVID-19. Use of personal protective measures and social distancing reduces the likelihood of

transmission.

Effective contact tracing is critical to controlling the spread of coronavirus disease (COVID-19) (1). South Korea adopted a rigorous contact-tracing program comprising traditional shoe-leather epidemiology and new methods to track contacts by linking large databases (global positioning system, credit card transactions, and closed-circuit television). We describe a nationwide COVID-19 contact tracing program in South Korea to guide evidence-based policy to mitigate the pandemic (2).

The Study

South Korea's public health system comprises a national-level governance (Korea Centers for Disease Control and Prevention), 17 regional governments, and 254 local public health centers. The first case of COVID-19 was identified on January 20, 2020; by May 13, a total of 10,962 cases had been reported. All reported COVID-19 patients were tested using reverse transcription PCR, and case information was sent to Korea Centers for Disease Control and Prevention.

We defined an index case as the first identified laboratory-confirmed case or the first documented case in an epidemiologic investigation within a cluster. Contacts in high-risk groups (household contacts of COVID-19 patients, healthcare personnel) were routinely tested; in non-high-risk groups, only symptomatic persons were tested. Non-high-risk asymptomatic contacts had to self-quarantine for 14 days and were placed under twice-daily active surveillance by public health workers. We defined a household contact as a person who lived in the household of a COVID-19 patient and a nonhousehold contact as a person who did not reside in the same household as a confirmed COVID-19 patient. All index patients were eligible for inclusion in this analysis if we identified ≥ 1 contact. We defined a detected case as a contact with symptom onset after that of a confirmed COVID-19 index patient.

We grouped index patients by age: 0–9, 10–19, 20–29, 30–39, 40–49, 50–59, 60–69, 70–79, and ≥ 80 years. Because we could not determine direction of transmission, we calculated the proportion of detected cases by the equation [number of detected cases/number of contacts traced] \times 100, excluding the index patient; we also calculated 95% CIs. We compared the difference in detected cases between household and nonhousehold contacts across the stratified age groups.

We conducted statistical analyses using RStudio (<https://rstudio.com>). We conducted this study as a legally mandated public health investigation under the authority of the Korean Infectious Diseases Control and Prevention Act (nos. 12444 and 13392).

We monitored 59,073 contacts of 5,706 COVID-19 index patients for an average of 9.9 (range 8.2–12.5) days after severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection was detected (Table 1). Of 10,592 household contacts, index patients of 3,417 (32.3%) were 20–29 years of age, followed by those 50–59 (19.3%) and 40–49 (16.5%) years of age (Table 2). A total of 11.8% (95% CI 11.2%–12.4%) household contacts of index patients had COVID-19; in households with an index patient 10–19 years of age, 18.6% (95% CI 14.0%–24.0%) of contacts had COVID-19. For 48,481 nonhousehold contacts, the detection rate was 1.9% (95% CI 1.8%–2.0%) (Table 2). With index patients 30–39 years of age as reference, detection of COVID-19 contacts was significantly higher for index patients >40 years of age in nonhousehold settings. For most age groups, COVID-19 was detected in significantly more household than nonhousehold contacts (Table 2).

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Conclusions

We detected COVID-19 in 11.8% of household contacts; rates were higher for contacts of children than adults. These risks largely reflected transmission in the middle of mitigation and therefore might characterize transmission dynamics during school closure (3). Higher household than nonhousehold detection might partly reflect transmission during social distancing, when family members largely stayed home except to perform essential tasks, possibly creating spread within the household. Clarifying the dynamics of SARS-CoV-2 transmission will help in determining control strategies at the individual and population levels. Studies have increasingly examined transmission within households. Earlier studies on the infection rate for symptomatic household contacts in the United States reported 10.5% (95% CI 2.9%–31.4%), significantly higher than for nonhousehold contacts (4). Recent reports on COVID-19 transmission have estimated higher secondary attack rates among household than nonhousehold contacts. Compiled reports from China, France, and Hong Kong estimated the secondary attack rates for close contacts to be 35% (95% CI 27%–44%) (5). The difference in attack rates for household contacts in different parts of the world may reflect variation in households and country-specific strategies on COVID-19 containment and mitigation. Given the high infection rate within families, personal protective measures should be used at home to reduce the risk for transmission (6). If feasible, cohort isolation outside of hospitals, such as in a Community Treatment Center, might be a viable option for managing household transmission (7).

We also found the highest COVID-19 rate (18.6% [95% CI 14.0%–24.0%]) for household contacts of school-aged children and the lowest (5.3% [95% CI 1.3%–13.7%]) for household contacts of children 0–9 years in the middle of school closure. Despite closure of their schools, these children might have interacted with each other, although we do not have data to support that hypothesis. A contact survey in Wuhan and Shanghai, China, showed that school closure and social distancing significantly reduced the rate of COVID-19 among contacts of school-aged children (8). In the case of seasonal influenza epidemics, the highest secondary attack rate occurs among young children (9). Children who attend day care or school also are at high risk for transmitting respiratory viruses to household members (10). The low detection rate for household contacts of preschool-aged children in South Korea might be attributable to social distancing during these periods. Yet, a recent report from Shenzhen, China, showed that the proportion of infected children increased during the outbreak from 2% to 13%, suggesting the importance of school closure (11). Further evidence, including serologic studies, is needed to evaluate the public health benefit of school closure as part of mitigation strategies.

Our observation has several limitations. First, the number of cases might have been underestimated because all asymptomatic patients might not have been identified. In addition, detected cases could have resulted from exposure outside the household. Second, given the different thresholds for testing policy between households and nonhousehold contacts, we cannot assess the true difference in transmissibility between households and nonhouseholds. Comparing symptomatic COVID-19 patients of both groups would be more accurate. Despite these limitations, the sample size was large and representative of most COVID-19 patients early during the outbreak in South Korea. Our large-scale investigation showed that pattern of transmission was similar to those of other respiratory viruses (12). Although the detection rate for contacts of preschool-aged children was lower, young children may show higher attack rates when the school closure ends, contributing to community transmission of COVID-19.

The role of household transmission of SARS-CoV-2 amid reopening of schools and loosening of social distancing underscores the need for a time-sensitive epidemiologic study to guide public health policy. Contact tracing is especially important in light of upcoming future SARS-CoV-2 waves, for which social distancing and personal hygiene will remain the most viable options for prevention. Understanding the role of hygiene and infection control measures is critical to reducing household spread, and the role of masking within the home, especially if any family members are at high risk, needs to be studied.

We showed that household transmission of SARS-CoV-2 was high if the index patient was 10–19 years of age. In the current mitigation strategy that includes physical distancing, optimizing the likelihood of reducing individual, family, and community disease is important. Implementation of public health recommendations, including hand and respiratory hygiene, should be encouraged to reduce transmission of SARS-CoV-2 within affected households.

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References

1. World Health Organization. Contact tracing in the context of COVID-19 [cited 2020 May 15]. <https://www.who.int/publications/i/item/contact-tracing-in-the-context-of-covid-19> [↗](#)
2. COVID-19 National Emergency Response Center. Epidemiology & Case Management Team, Korea Centers for Disease Control & Prevention. Contact transmission of COVID-19 in South Korea: novel investigation techniques for tracing contacts. *Osong Public Health Res Perspect*. 2020;11:60–3. [DOI](#) [↗](#)
3. Choe YJ, Choi EH. Are we ready for coronavirus disease 2019 arriving at schools? *J Korean Med Sci*. 2020;35:e127. [DOI](#) [↗](#) [PubMed](#) [↗](#)
4. Burke RM, Midgley CM, Dratch A, Fenstersheib M, Haupt T, Holshue M, et al. Active monitoring of persons exposed to patients with confirmed COVID-19—United States, January–February 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69:245–
6. [DOI](#) [↗](#) [PubMed](#) [↗](#)

DOI [PubMed](#)

5. Liu Y, Eggo RM, Kucharski AJ. Secondary attack rate and superspreading events for SARS-CoV-2. *Lancet*. 2020;395:e47. DOI [PubMed](#)
6. Jefferson T, Del Mar C, Dooley L, Ferroni E, Al-Ansary LA, Bawazeer GA, et al. Physical interventions to interrupt or reduce the spread of respiratory viruses: systematic review. *BMJ*. 2009;339(sep21 1):b3675.
7. Park PG, Kim CH, Heo Y, Kim TS, Park CW, Kim CH. Out-of-hospital cohort treatment of coronavirus disease 2019 patients with mild symptoms in Korea: an experience from a single community treatment center. *J Korean Med Sci*. 2020;35:e140. DOI [PubMed](#)
8. Zhang J, Litvinova M, Liang Y, Wang Y, Wang W, Zhao S, et al. Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China. *Science*. 2020;368:1481–6. DOI [PubMed](#)
9. Principi N, Esposito S, Marchisio P, Gasparini R, Crovari P. Socioeconomic impact of influenza on healthy children and their families. *Pediatr Infect Dis J*. 2003;22(Suppl):S207–10. DOI [PubMed](#)
10. Ferguson NM, Cummings DA, Fraser C, Cajka JC, Cooley PC, Burke DS. Strategies for mitigating an influenza pandemic. *Nature*. 2006;442:448–52. DOI [PubMed](#)
11. Liu J, Liao X, Qian S, Yuan J, Wang F, Liu Y, et al. Community transmission of severe acute respiratory syndrome coronavirus 2, Shenzhen, China, 2020. *Emerg Infect Dis*. 2020;26:1320–3. DOI [PubMed](#)
12. Choe YJ, Smit MA, Mermel LA. Comparison of common respiratory virus peak incidence among varying age groups in Rhode Island, 2012–2016. *JAMA Netw Open*. 2020;3:e207041. DOI [PubMed](#)

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Tables

Table 1. Contacts traced by age group of index coronavirus disease patients, South Korea, January 20–March 27, 2020

Table 2. Rates of coronavirus disease among household and nonhousehold contacts, South Korea, January 20–March 27, 2020

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EXHIBIT "15"

Too Many Schools Leave Learning to Chance During the Pandemic

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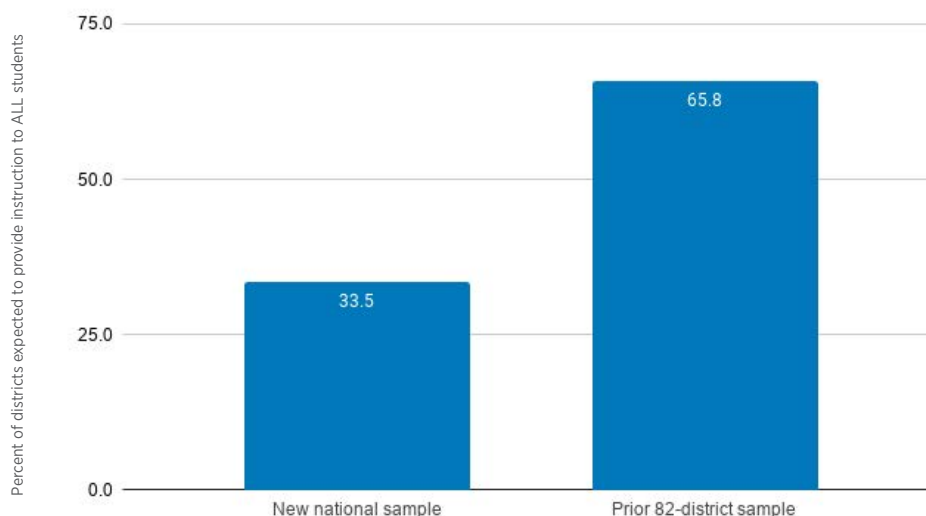
We knew the sudden shift to remote learning would be hard. For the last two months CRPE followed a group of large, mostly urban school systems as they clarified their expectations for teaching students, tracking attendance, and monitoring learning. These districts are prominent in the national debate and serve nearly one of every six public school students in the country. But we knew they might not represent the experience of all school systems in the U.S.

Now, for the first time, we are releasing results from a new, nationally representative sample of 477 school systems. This new analysis includes the 81 U.S. school districts in the original database, but adds 396 districts. We apply statistical weights to provide a nationally representative sample of U.S. school districts. For the first time, then, we are able to compare remote education in districts in different types of communities and with different student characteristics.

The original cohort of districts we followed showed increasing clarity and expectations for instruction, tracking student engagement, and progress monitoring. The nationally representative sample reveals a more sobering story.

We found just one in three districts expect teachers to provide instruction, track student engagement, or monitor academic progress for all students—fewer districts than our initial study suggested. Far too many districts are leaving learning to chance during the coronavirus closures.

Figure 1. Districts That Expect Teachers to Provide Remote Instruction



We also found significant gaps between rural districts and their urban and suburban counterparts. And school districts in affluent communities are twice as likely as their peers in more economically disadvantaged communities to expect teachers to deliver real-time lessons to groups of students.

These results are likely a function of uncertainty about technology access, but the net result is that many students in these communities were unlikely to receive consistent instruction in spring 2020.

Two-Thirds of Districts Set Low Expectations for Sustaining Instruction

Nationally, nearly all districts—85 percent—made sure their students received some form of grade- and subject-specific curriculum in packets; assignments posted in Google Classroom, Canvas, or some other platform; or guidance to complete segments of online learning software. Educators, however, understand that the *instructional core* is defined by the interaction between teachers, students, and content. The teachers' role in this interaction involves more than delivering assignments to students.

Remote instruction can take many forms: live video lessons, recorded lectures, one-on-one support over the phone, or feedback delivered through an online platform. Yet we found that only one-third of districts expect all of their teachers to continue to engage and interact with all of their students around the curriculum content.

We know that some teachers are going beyond their district's expectations to continue instruction. But [lacking clear expectations](#) to provide instruction, districts open themselves up to [wide variation](#) in what remote learning looks like from teacher to teacher, subject to subject, class to class.

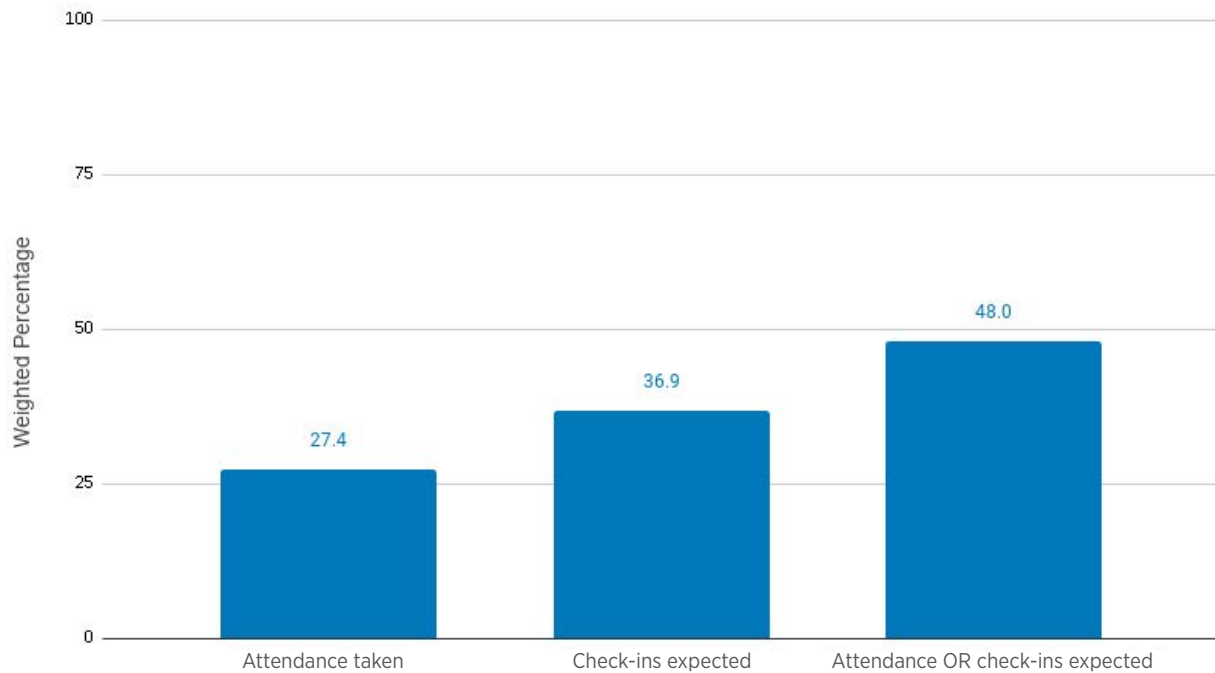
Experience tells us that low expectations for instruction bode poorly for the students who faced the greatest challenges: those in low-income households, those with disabilities, those who speak a language other than English at home.

Only Half of the Districts Track Students' Engagement in Learning

Only half of districts nationally expect teachers to track their students' engagement in learning through either attendance tracking or one-on-one check-ins. Our review finds 27 percent of school districts require schools to track their students' attendance—which could include monitoring logins to online platforms or other metrics for participation used as a proxy for attendance. This data is one way for districts to monitor which students they are reaching during the pandemic, and to report this information to policymakers and the general public.

Where technology access is limited and students don't have a consistent method for demonstrating their attendance, tracking regular attendance may not be meaningful. But teachers can still be expected to [make regular contact](#) with their students by phone or text to assess engagement and problem-solve for students' varied experiences at home. We found that a slightly higher proportion (37 percent) of districts require teachers to check in one-on-one with their students on a regular basis. Looking across both approaches to monitor students' engagement, we found that just under half of districts set clear expectations for monitoring engagement.

Figure 2. Expectations for Tracking Student Engagement



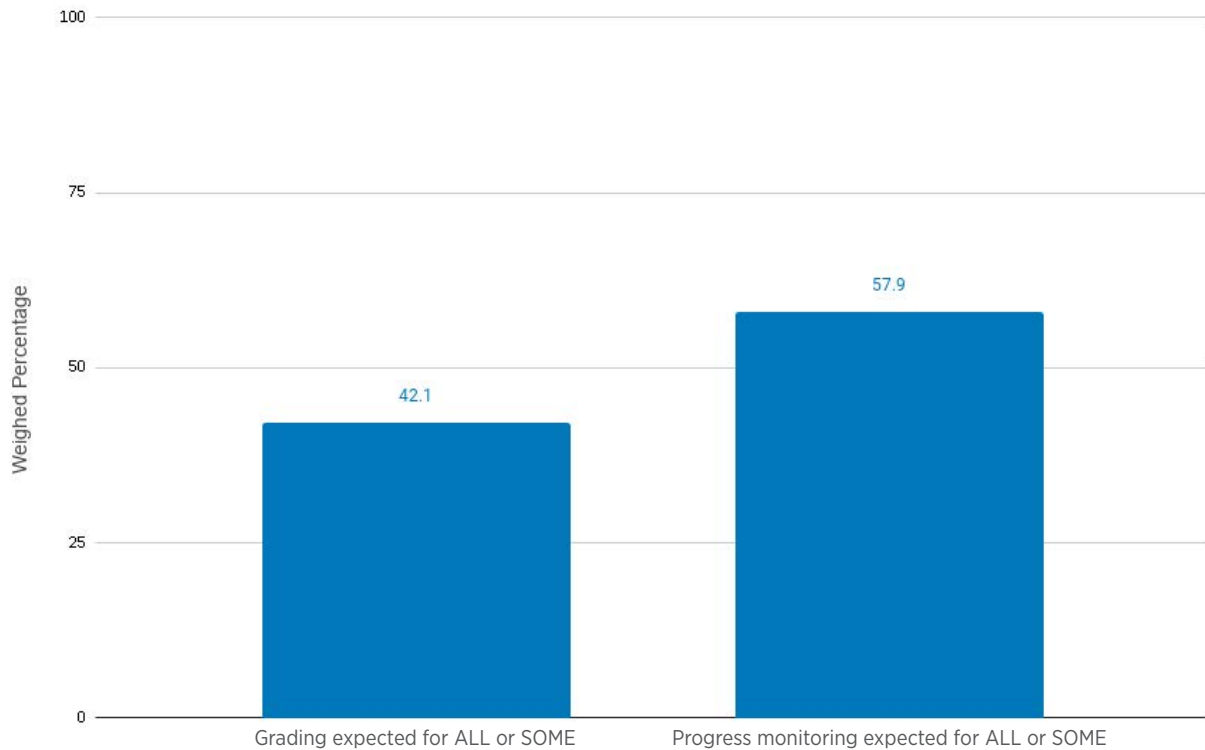
Again, many teachers are keeping in touch with their students—and we know that some are doing so even in districts that don't require them to do so. But lacking a clear expectation to sustain contact with each student, it isn't hard to imagine that teachers will stay in touch with students who are easy to contact, while students who are less connected are at greater risk of falling through the cracks.

More Than Four Districts in Ten Do Not Require Teachers to Monitor Students' Academic Progress

Tracking student progress by collecting work for review, assessing students' progress toward academic benchmarks, or grading their work is the best way to gauge if students are continuing to learn in their remote settings. It may also be our only way to get a sense of gaps in students' learning that may emerge before the fall, when districts may be able to assess where students stand.

Again, we found worrisome trends in the expectations districts set. Just 42 percent expect teachers to collect student work, grade it, and include it in final course grades for at least some students (typically those in middle and upper grades).

Figure 3. Expectations for Progress Monitoring and Grading



More districts (about 58 percent) expect their teachers to monitor progress or provide feedback (if not grades) for at least some of their students—typically older students. Even still, this means two out of five districts make no firm expectation for students to complete assignments and leave families on their own to keep track of learning. Lacking any progress monitoring this spring, teachers may reconvene with their students this fall with little information on what students accomplished during nearly three months of closures—or what learning gaps emerged, for which students, during months of lost learning time.

About Our Analysis

The COVID-19 response database tracks how a nationally representative group of school districts responded to the COVID-19 school closures in spring 2020. The goal of this effort is to create a national portrait of the expectations school districts set for the continuation of learning and support to students during the spring closure period. Our sample includes 477 school districts, sampled and weighed to reflect a representative cross-section of school districts across the U.S. We collected and coded publicly available information, merging the coded data with descriptive information on each district, such as percent of students receiving free or reduced-price lunch, racial demographics, and locale description from the National Center on Education Statistics Common Core of Data.

This project is a collaboration with RAND Corporation, and stems from the ongoing American School District Panel project, a project intended to build a nationally representative panel of American school districts. The project also builds on CRPE’s prior COVID-19 response database, which tracked the progress of 82 school districts in rolling out remote learning plans through the COVID crisis in real time. We have included 81 of these original districts (Toronto is excluded), which were generally large and urban, in this new representative sample, but they are weighed appropriately.

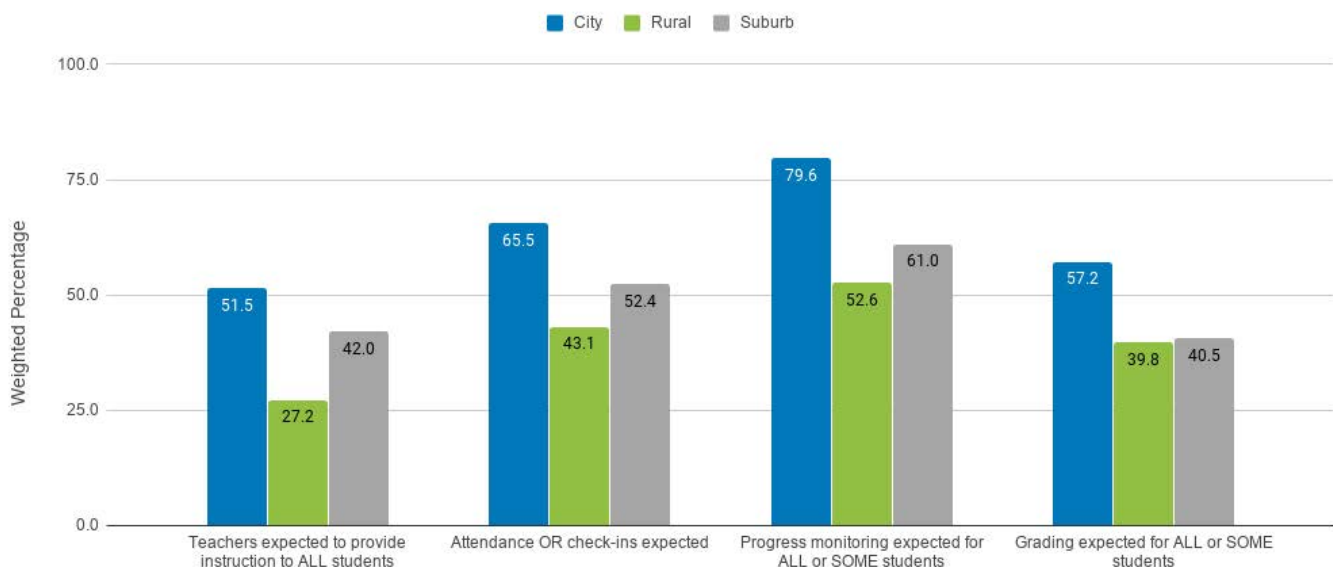
Because districts’ responses have changed as the closures continued, we plan to update these data this month. In a subsequent round of coding, we will re-code the original indicators on instruction during spring 2020. We will also add new codes reflecting districts plans for summer programming and contingency planning for fall 2020.

More details on coding and methodology are provided in Appendix B and C of our research brief.

The Largest Divide in Access to Instruction and Progress Monitoring May Be Between Urban and Rural School Districts

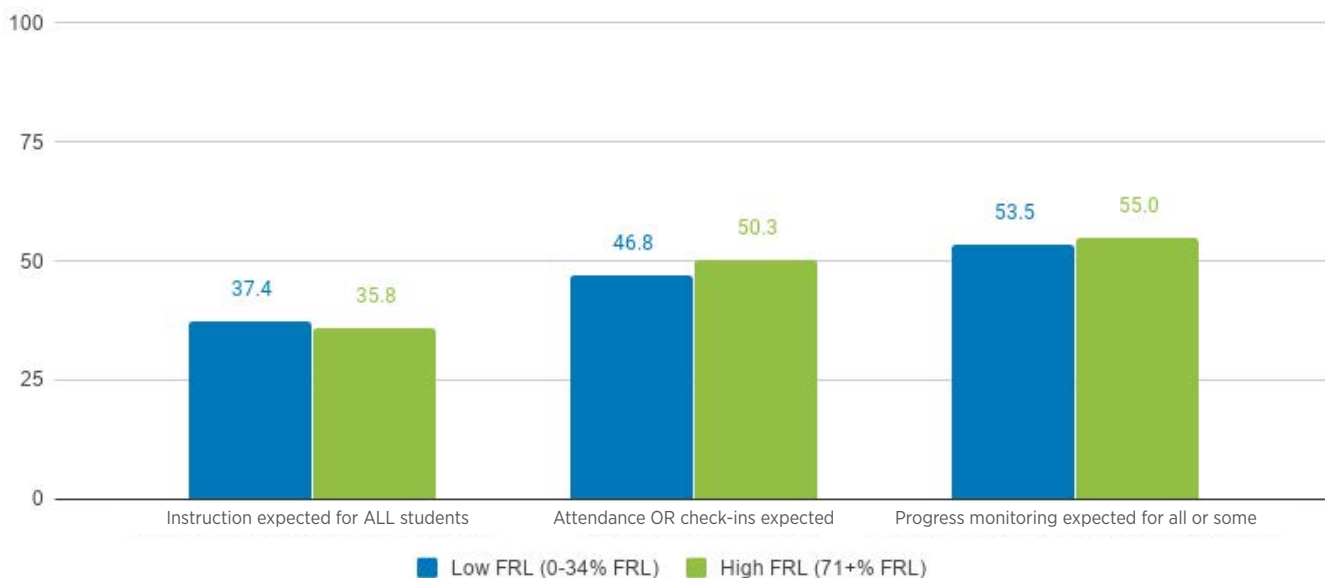
Rural districts, where internet infrastructure lags well behind urban and suburban areas, were bound to face more challenges in providing remote learning. Our analysis indeed shows gaps between the expectations for instruction, staying in touch with students, and progress monitoring. Only 27 percent of rural and small-town school districts expect teachers to provide instruction, compared with over half of urban school districts. There are similar gaps for expectations to monitor engagement: 43 percent of rural school districts expect teachers to take attendance or check-in with their students on a regular basis, compared with 65 percent of urban districts. And there is more than a 25 percentage point gap in the proportion of rural districts that require progress monitoring and a 17 percentage point gap in the proportion of rural districts that provide formal grades of some kind, compared with urban districts.

Figure 4. Gaps in Expectations for Instruction and Monitoring Progress by Region



This rural-urban divide in expectations is stark—far more so than the gap in instruction between districts with high concentrations of students who qualify for free or reduced-price lunch. When we divide the sample into quartiles based on the district’s concentration of economically disadvantaged students, we do not see a clear divide between the districts with the highest and lowest quartiles in terms of expectations for instruction, tracking student engagement, or progress monitoring.

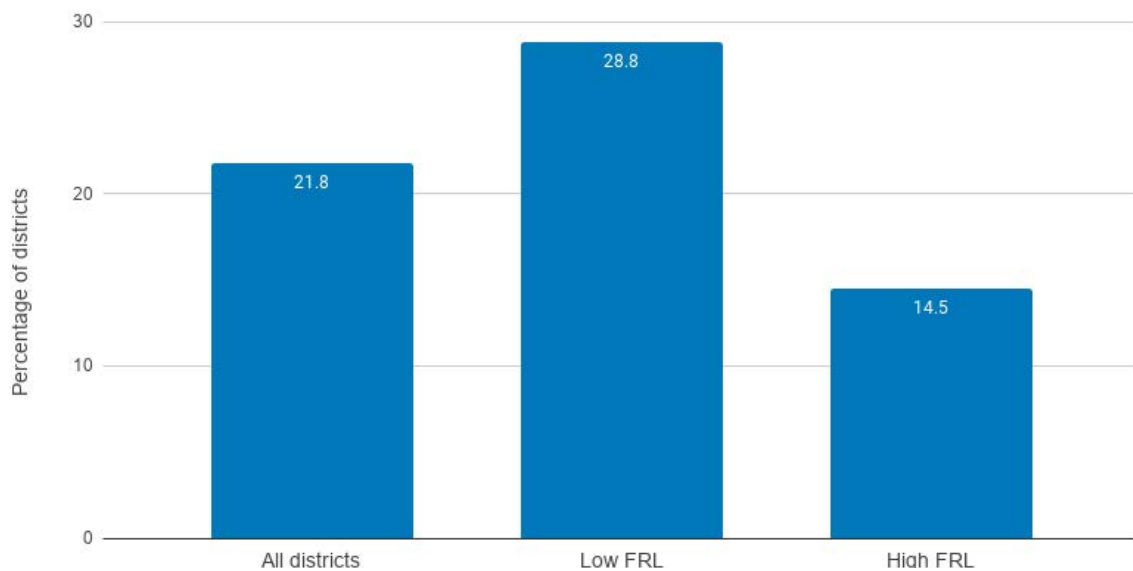
Figure 5. Expectations for Instruction and Monitoring by High and Low Free and Reduced-Price Lunch Districts



Affluent Districts Are Twice as Likely as High-Poverty Districts to Require Live Instruction

More affluent school districts are more likely to require live video instruction from teachers. While expectations around synchronous, or real-time, teaching are uncommon across the board (expected in 21.8 percent of districts), only 14.5 percent of school districts with the highest concentration of students receiving free or reduced-price lunch expect teachers to provide live instruction. The most affluent 25 percent of districts in our sample are twice as likely to expect real-time teaching.

Figure 6. Districts Expect Teachers to Provide Synchronous Instruction to At Least Some Students



This gap is most likely due to concerns about students’ access to technology in high-poverty districts but does show how concerns about access can shape the learning opportunities districts expect their teachers to provide—with the net result that higher-poverty districts are setting somewhat lower expectations that students receive live interaction with teachers and classmates.

Looking Ahead to Summer and Fall

Rolling out quality remote learning plans is something that would ordinarily take districts months, if not years, of planning. The COVID-19 crisis forced districts to accomplish this in a matter of weeks, while balancing equity and connectivity needs and providing access to basic resources. It was unlikely to be perfect.

This spring, it seems far too many school districts let perfect be the enemy of good. In the challenge to connect all students, they left the level of instruction and progress monitoring up to the discretion of schools and teachers, thus creating highly varied learning experiences for their students. Without clear expectations across the board, and therefore pressure to meet the needs of each student, many districts likely left at risk the learning experiences of students who face the greatest challenges.

This need to pick up the slack was felt by parents who, in surveys, [reported worry](#) that their child is missing instruction and [felt unsure](#) about their ability to support their child’s learning at home. In [one survey](#) only 33 percent of parents reported regular access to their child’s teachers. And teachers felt these low expectations, too: in [another survey](#), over half of responding teachers were worried that their students would fall behind academically. [Most report](#) less time spent on instruction than usual, and lower engagement from their students.

Districts have an opportunity to do better by students, teachers, and parents this fall. Official guidance [advises](#) schools to prepare for continued uncertainty and some level of remote learning for fall 2020. School districts now have several months to plan ahead to align the resources, create teacher professional development, and assess community priorities to design plans for the fall that have high expectations for each student’s learning and are responsive to each student’s needs. CRPE will support this hard work by continuing to track districts’ plans for summer and fall learning, sharing innovative strategies, and pushing for ways funders and policymakers can alleviate the burden. Despite the challenge of the COVID-19 crisis, we cannot continue to leave learning to chance for any student.

Appendix A. Full Data Tables

Sample includes 477 school districts weighted to provide nationally representative sample. Results are reported as % of group and reflect weighted frequency.

| | By free and reduced-price federal lunch (FRL) quartile (see note 1) | | | | | Comparing extremes | | | By locale (see note 2) | | |
|---|---|------------------------------|----------------------------|----------------------------|--------------------------|-----------------------------------|--------------------------------|--|------------------------|-----------------|-----------------|
| | All | Quartile 1 (0-34% FRL) | Quartile 2 (35-52% FRL) | Quartile 3 (53-70% FRL) | Quartile 4 (71+% FRL) | High FRL: FRL >=75% (15.4%) | Low FRL: FRL <25% (9.9%) | Medium FRL: 25%<=FRL<75% (74.7%) | City 12.7% | Rural 65.2 % | Suburb 22.1% |
| | Weighted Percentage | | | | | Weighted Percentage | | | Weighted Percentage | | |
| Content and teaching | | | | | | | | | | | |
| No curriculum resources provided | 1.5 | 1.1 | 1.4 | 0.9 | 2.9 | 4.0 | 2.3 | 0.9 | 0.0 | 1.6 | 2.1 |
| General learning resources provided | 10.1 | 10.8 | 6.9 | 14.5 | 8.4 | 6.2 | 10.1 | 10.8 | 7.4 | 9.6 | 12.8 |
| Grade and subject specific resources provided | 84.7 | 81.8 | 87.3 | 82.8 | 86.0 | 86.2 | 78.0 | 85.3 | 92.0 | 83.5 | 84.1 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| District expects ALL teachers to engage with students around content via synchronous or asynchronous means | 33.5 | 37.4 | 26.3 | 37.5 | 35.8 | 38.0 | 52.9 | 30.1 | 51.5 | 27.2 | 42.0 |
| District expects SOME teachers to engage with students around content via synchronous or asynchronous means | 13.2 | 17.8 | 18.4 | 7.0 | 8.6 | 9.4 | 9.6 | 14.5 | 10.3 | 14.7 | 10.5 |
| District does not make an explicit expectations around teaching | 49.5 | 38.5 | 50.9 | 53.7 | 53.0 | 49.1 | 27.9 | 52.4 | 37.5 | 52.8 | 46.5 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| Synchronous teaching expected for ALL teachers | 7.9 | 9.4 | 8.2 | 4.4 | 8.4 | 8.5 | 14.6 | 6.3 | 5.7 | 7.4 | 8.8 |
| Synchronous teaching expected for SOME teachers | 13.9 | 19.4 | 17.4 | 11.7 | 6.1 | 7.3 | 16 | 15.1 | 9.7 | 14.8 | 14.1 |
| No expectations around synchronous teaching | 74.8 | 64.9 | 70 | 82.1 | 82.8 | 80.6 | 59.8 | 75.6 | 83.9 | 72.6 | 76 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| Monitoring engagement and progress | | | | | | | | | | | |
| Attendance is taken | 27.4 | 34.6 | 26.4 | 24.1 | 26.1 | 27.4 | 40.6 | 25.7 | 25.6 | 24.2 | 38.0 |
| No expectations about attendance | 68.9 | 59.1 | 69.2 | 74.2 | 71.3 | 69.0 | 49.8 | 71.3 | 73.8 | 70.5 | 61.0 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| Checkins are expected | 36.9 | 25.2 | 37.1 | 41.9 | 42.1 | 43.7 | 25.0 | 37.1 | 59.6 | 34.8 | 30.1 |
| No expectations about checkins | 59.3 | 68.5 | 58.5 | 56.3 | 55.2 | 52.7 | 65.4 | 59.9 | 39.7 | 59.9 | 68.8 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| Attendance OR checkins expected | 48.0 | 46.8 | 48.9 | 46.1 | 50.3 | 51.8 | 52.4 | 46.7 | 65.5 | 43.1 | 52.4 |
| No expectations about attendance or check-ins | 48.3 | 46.9 | 46.6 | 52.1 | 47.1 | 44.6 | 38.0 | 50.3 | 33.9 | 51.6 | 46.6 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| Progress monitoring for ALL students | 48.0 | 38.8 | 52.3 | 53.7 | 43.5 | 42.1 | 45.7 | 49.6 | 65.2 | 43.2 | 52.4 |
| Progress monitoring for SOME students | 9.9 | 14.7 | 6.3 | 9.2 | 11.4 | 9.6 | 5.3 | 10.5 | 14.4 | 9.4 | 8.6 |
| No progress monitoring expected | 38.3 | 40.2 | 36.9 | 35.4 | 42.4 | 44.7 | 39.5 | 36.9 | 19.7 | 42.1 | 38.0 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1.0 |
| Grading is done for ALL students | 29.0 | 19.6 | 32.5 | 32.0 | 29.2 | 30.5 | 22.5 | 29.6 | 29.5 | 29.6 | 27.1 |
| Grading is done for SOME students | 13.1 | 14.9 | 11.8 | 15.9 | 9.6 | 9.9 | 10.9 | 14.0 | 27.7 | 10.2 | 13.4 |
| No grading expected | 54.4 | 59.1 | 51.2 | 50.4 | 58.5 | 56.0 | 57.0 | 53.4 | 42.2 | 55.0 | 58.5 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3.0 | 0.6 | 5.3 | 1.0 |
| Technology | | | | | | | | | | | |
| Hotspots (community or home based) | 30.4 | 25.7 | 33.6 | 30.2 | 30.6 | 34.8 | 20.5 | 30.9 | 48.5 | 28.6 | 25.4 |
| No mention of hotspots provided | 65.9 | 68 | 62 | 68 | 66.8 | 61.6 | 69.9 | 66.1 | 50.8 | 66.1 | 73.6 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3 | 0.6 | 5.3 | 1 |
| Devices provided to all or some students ("some" typically means upper grades only or means based) | 52.0 | 53.4 | 47.8 | 62.1 | 44.2 | 47.9 | 52.0 | 52.8 | 84.6 | 43.2 | 59.1 |
| No mention of devices provided | 44.3 | 40.3 | 47.8 | 36.1 | 53.2 | 48.5 | 38.4 | 44.2 | 14.8 | 51.5 | 39.9 |
| No closure information found (see note 3) | 3.7 | 6.3 | 4.4 | 1.8 | 2.6 | 3.6 | 9.6 | 3.0 | 0.6 | 5.3 | 1.0 |

Appendix A. Full Data Tables (cont.)

Note 1.

Quartile 1: the 25 percent of districts with the lowest concentration of low-income students, as measured by the percentage of students who qualify for FRL, and includes districts with between zero and 34 percent of such students.

Quartile 2: the 25 percent of districts with the second-lowest concentration of low-income students, as measured by the percentage of students who qualify for FRL, and includes districts with between 35 and 52 percent of such students.

Quartile 3: the 25 percent of districts with the third-lowest concentration of low-income students, as measured by the percentage of students who qualify for FRL, and includes districts between 53 and 70 percent of such students.

Quartile 4: the 25 percent of districts with the fourth-lowest concentration of low-income students, as measured by the percentage of students who qualify for FRL, and includes districts with 71 and above percent of such students.

Note 2. City, Rural, Suburban configuration:

All NCES codes for City (11 - Large, 12 - Midsize, and 13 - Small) are collapsed to “city.”

All NCES codes for Suburban (21 - Large, 22 - Midsize, 23 - Small) are collapsed to “suburb.”

All NCES codes for “Town” and “Rural” (31 - Town, Fringe; 32 - Town, Distant; 33 - Town, Remote; and 41 - Rural, Fringe; 42 - Rural, Distant; and 43 - Rural, Remote) are collapsed to “rural.”

Note 3. “No closure information found”:

We report a district as “no closure information found” when we fail to find any web-based public information on the district or any reference to COVID-19 or coronavirus school closures on the district’s website, Facebook page, or Twitter account. We chose to include “no information” districts in all of our analyses because we feel the lack of easy-to-access public information is a salient concern amid the closures.

Appendix B. Code Definitions

| Category | Indicator | Measure | Definition | Examples |
|-------------|--------------------------------|-----------------------------|--|---|
| Curriculum | Resources provided by district | None General Specific | <p>None = District provides no resources or expectations about curriculum, lessons, or activities.</p> <p>General = District provides a menu of learning resources (not sequential lessons). This could be a general list of resources or it could be a list organized by grade-level. This is essentially the most passive option.</p> <p>Specific = District provides (or expects schools to provide) curated/directive curriculum, placing each student in a specific position in a resource and prescribing their pacing through that resource, lessons/activities/units that are associated with a grade-level and a subject area (at least ELA and mathematics), or daily or weekly physical or downloadable packets that are distinct from the previous day or week's packet. These may be created by the district, schools, teachers, or a 3rd party.</p> <p>Ratings are rounded up. So if any specific resources are available, the district gets a "specific" rating. The next content indicator, "Resource coverage" provides an opportunity to indicate whether the "Resources provided by the district" rating was based on providing resources to all grades (All) or if it was rounded up from only some grades (Partial).</p> | <p>None = District website says schools are on break or closed until XYZ date with no information about learning expectations.</p> <p>General = District provides a list of homepage links to Khan Academy, the local library system, kidsreads.com, etc. Or district provides paper or digital packet of optional activities (things to do) that are not part of a curriculum or sequence of learning.</p> <p>Specific = District communications/plans explain that teachers are expected to provide students with assignments during the week or district makes work packets by grade level and subject available.</p> <p>For a district that delegates decision-making to its schools or teachers, it would receive a "specific" rating if it communicates expectations for teachers or schools to provide specific curriculum.</p> |
| | Resource coverage | None All Partial | <p>None = No grades covered.</p> <p>All = Resources for all grades (at least K-12).</p> <p>Partial = Resources for some grades (must explain what partial arrangement is in "coverage note" column).</p> | <p>Partial = If partial, explain in the "Explanation of partial coverage column". For example, you might write "For high school only."</p> |
| Instruction | Instruction from teachers | None All Partial | <p>None = No instruction.</p> <p>All = Instruction for all grades (at least K-12).</p> <p>Partial = Instruction for some grade bands (must explain what partial arrangement is in "Partial Explanation of Instruction" column).</p> <p>District expects teachers to engage with students to help them access and understand content. There may be different approaches taken, but there must be strategies in place to help students understand content and assignments. Students are not expected to rely primarily on themselves or parents to understand content or assignments. This could happen via live instruction, pre-recorded video, online platforms, one on one conversations that are tied to content, or other strategies that ensure that students receive structured guidance on concepts.</p> <p>For a district to be marked as a "yes" on instruction, there has to be an expectation communicated that teachers will be providing instruction or instructional resources, not just uploaded assignments or work packets on a learning management platform.</p> | <p>For a district that delegates decision-making to its schools or teachers, it would receive an "all" rating if it communicates expectations for teachers or schools provide instruction. Partial = If partial, explain in the Coverage Notes column. For example, you might write "For high school only."</p> <p>District communications/plans explain that teachers will post video lessons or provide other instructional resources on Google Classroom or other platforms along with assignments -- beyond just uploading assignments and offering office hours.</p> <p>District communications/plans explain that teachers will provide "real-time" instruction for students over video conference at scheduled times.</p> <p>District communications/plans explain that teachers will assign virtual instruction via online instructional platforms like Edgenuity, iReady, or Khan Academy. These assignments must be directed by teachers and tied to classwork or assignments, not offered as general resources.</p> <p>Students receive daily calls from a teacher to talk through their understanding of work assigned in packets.</p> <p>Partial: Middle and highschool students receive synchronous instruction or are directed to instruction on a platform while elementary students receive work packets only.</p> <p>Do not count districts where some teachers choose to provide instruction, but it is not an expectation for all as "partial."</p> <p>None = Teacher office hours or real-time video chat that isn't attached to a lesson.</p> <p>Teacher uploading weekly curricular assignments without accompanying instruction.</p> <p>Code "none" if there is not enough evidence that instruction is happening, or if it seems up to teacher discretion.</p> <p>Code "none" if it is an optional, student selected instructional resource, like public TV programming that is not directed by teachers or connected to curriculum.</p> |
| | Synchronous teaching flag | None All Partial | <p>None = No synchronous teaching.</p> <p>All = Synchronous teaching for all grades.</p> <p>Partial = Synchronous teaching for some grades (must explain what partial arrangement is in "coverage note" column).</p> <p>District expects some synchronous ("real time") teaching. Offering office hours does not count as synchronous teaching.</p> | <p>Partial = If partial, explain in the Coverage Notes column. Fort example, you might write "For high school only."</p> <p>District communications/plans explain that teachers will provide "real-time" instruction for students over video conference.</p> <p>For a district that delegates decision-making to its schools or teachers, even if some teachers are providing synchronous instruction it would not receive an "all" or "partial" rating unless all teachers in the district/grade level are asked to provide it.</p> |

Appendix B. Code Definitions (cont.)

| | | | | |
|---------------------|-------------------------------------|---------------------------|---|--|
| | Synchronous student engagement flag | None All Partial | <p>None = No synchronous student engagement.</p> <p>All = Synchronous student engagement for all grades.</p> <p>Partial = Synchronous student engagement for some grades</p> <p>District expects teacher to facilitate some student-to-student</p> | <p>None = Office hours would count as teacher check-in, but not synchronous student engagement.</p> <p>Partial = If partial, explain in the Coverage Notes column. For example, you might write "For high school only."</p> <p>District communications/plans explain that teachers will facilitate whole-group sessions among students in their class (e.g., video conference).</p> <p>District communications/plans explain that teachers will facilitate virtual advisory class.</p> <p>District communications/plans explain that teachers are expected to assign collaborative group projects that require students to work together virtually with or without the teacher present.</p> <p>For a district that delegates decision-making to its schools or teachers, even if some students are experiencing synchronous engagement it would not receive an "all" or "partial" rating unless all students in the district/grade level are expected to receive it.</p> |
| | Students with disabilities | Yes No | <p>Yes = District webpage specifically mentions how schools and/or the district will support students with disabilities.</p> <p>No = District webpage does not provide information mentioning how schools and/or the district will support students with disabilities.</p> | <p>This indicator captures a range of possibilities. The lowest bar: a district communicates that IEP meetings will be virtual or that specialists will be reaching out directly to families to talk about supports for student learning; others might have more elaborate resources or plans.</p> |
| Progress monitoring | Feedback on student work | None All Partial | <p>None = no feedback</p> <p>All = feedback for all grades (K-12)</p> <p>Partial = feedback expected for some grades (must explain what partial arrangement is in "coverage note" column).</p> <p>District expects teachers to provide feedback on student work, monitor the academic progress of students, or issue grades. This measure captures multiple points on this continuum. The next indicator (formal grading flag) identifies the subset of districts that require some student work completed during the shutdowns to contribute to their final course grade.</p> | <p>Partial = If partial, explain in the Coverage Notes column. For example, you might write "For high school only."</p> <p>District communications/plans explain that teachers should request that students submit work, provide students with feedback on their work, monitor student progress, and/or grade students work for contribution to the student's grade.</p> <p>Note that the lowest bar for an affirmative answer (All or Partial) is students are asked to submit some of their work to their teachers.</p> <p>For a district that delegates decision-making to its schools or teachers, even if some teachers are providing feedback on student work it would not receive an "all" or "partial" rating unless all teachers in the district/grade level are asked to provide it.</p> |
| | Formal grading flag | None All Partial | <p>None = No grading of student work.</p> <p>All = Grading of student work for all grades (e.g., ELM, MS, HS).</p> <p>Partial = Grading of student work expected for some grades (must explain what partial arrangement is in "coverage note" column).</p> <p>The formal grading flag identifies the subset of districts that require some student work completed during the shutdowns to contribute to their final course grade.</p> | <p>Partial = If partial, explain in the Coverage Notes column. For example, you might write "For high school only."</p> <p>District communications/plans explain that teachers will be recording grades on student work. Pass/Fail and Extra Credit only count as a formal grade.</p> <p>None = District communications/plans mentions that teachers may be grading or scoring assignments but that these scores won't contribute to the final course grade.</p> |
| | Teacher Check In | Yes No | <p>Yes = District communicates an expectation that teachers will check in with students, via phone call, email or virtual platform.</p> <p>No = No expectations communicated for teachers to check in with students.</p> <p>This indicator captures whether teachers are maintaining contact and connection with students outside of instruction and regular class settings.</p> | <p>District communicates that teachers will be calling students 1:1 to check in.</p> <p>District communicates that teachers will hold office hours if students or families have questions.</p> <p>Advisors hold advisory class. Teachers hold morning meetings or weekly wellness meetings.</p> |
| Learning Time | Attendance tracking | Yes No | <p>Yes = District communicates a process for tracking student attendance.</p> <p>No = District does not communicate a process for tracking student attendance.</p> | <p>District communicates some process for capturing student attendance. Examples could be students are asked to log in each day to a virtual platform, students are asked to download instruction or assignments each day via an app like Canvas, students are asked to submit a response to a "question of the day", teachers record attendance via phone calls home.</p> |
| | Instructional minutes | Yes No | <p>Yes = District recommends or requires a certain amount of instructional minutes each day or week.</p> <p>No = District does not recommend or require minimum instructional minutes.</p> | |
| Technology | Device distribution | None All Partial | <p>None: No devices provided, or district hasn't started providing devices yet.</p> <p>All: Devices provided for all students.</p> <p>Partial: Devices provided for some grades, or one per family, etc. (must explain what partial arrangement is in "coverage note" column).</p> <p>District provides technology devices (laptops, tablets) to students.</p> | <p>Partial: If partial, explain in the Coverage Notes column. For example, you might write "For high school only" or "One per family, not each student." Partial also applies if the district is in process of providing devices, but they have not been provided to all grade levels yet.</p> |
| | Hotspot access | Community Home Both | <p>Community-based: Hotspots provided to students at school or community-based sites.</p> <p>Home-based: Mobile or personalized hotspots provided for some grades or student groups.</p> <p>Both: Both provided.</p> | <p>Community-based: District has established amplified wifi outside school parking lots, or is stationing buses equipped with wifi in communities.</p> <p>Home-based: District provides phones equipped with wifi or pays for parents to establish mobile hotspots on their personal phones.</p> |

Appendix C. Methodology

1. Description of the Project

The COVID-19 response database tracks how a nationally representative group of school districts responded to the COVID-19 school closures in spring 2020. The goal of this effort is to capture a national portrait of the expectations districts set for the continuation of learning and support to students during the spring closure period. Our sample includes 477 school districts, sampled and weighed to reflect a representative cross-section of school districts across the U.S. We collected and coded publicly available information that captured the level of curricular resources and instruction, feedback, and tracking of student work, and basic resources like devices and meals provided to students during school closures. We merged the coded data with descriptive information on each district, such as percent of students receiving free or reduced-price lunch, racial demographics, and locale description from the National Center on Education Statistics Common Core of Data.

Because districts' responses have changed as the closures continued, we plan to update these data at the end of May 2020. In a subsequent round of coding, we will re-code the original indicators on instruction during spring 2020. We will also add new codes reflecting districts' plans for summer programming and contingency planning for fall 2020.

This project is a collaboration with RAND Corporation, and stems from the ongoing American School District Panel project, a project intended to build a nationally representative panel of American School Districts.

2. Sources Accessed for Information

For each school district, we coded the indicators based on publicly available information. Primary sources were the school district website and social media (district Facebook pages or Twitter, YouTube). When needed, analysts would check individual school websites or, if publicly accessible, teachers' online learning platform pages (such as Google Classroom).

In total we found no references to school closures on the district's website or social media feeds for 14 of the sampled districts. We coded these districts as "no information on closure." Some districts offered very limited information on their websites or other social media, and it was clear that these districts (or district representatives) directly communicated information on closure procedures and plans with parents via email or some other parent communication platform. As such, these accounts should be considered a conservative take on districts' responses.

We gathered descriptive information from the school districts (enrollment, racial demographics, percent of students receiving free or reduced-price lunch, locale code) from the National Center for Education Statistics. For the majority of school districts, this was based on 2016 data. A small subset of school districts were missing free or reduced-price lunch data for 2016, so we included 2015 data in the analysis.

3. Coder Training

Coders participated in several training and norming activities, including: (1) all coders reviewed a codebook outlining definitions for codes in the various fields of interest, (2) all coders reviewed information from districts, then coded a common sample of four districts, then met to discuss alignment and misalignment, (3) all inexperienced coders were paired with an experienced coder to who would check their codes against the correct coding for the four districts, and discuss any discrepancies, (4) all coders participated in multiple alignment sessions in which they discussed coding questions and further aligned on code definitions.

During the next round of coding, we will add four new coders to the team, and we will go through a similar process of test-coding four districts. We will discuss the responses and any misalignment as a team to make sure that the team is fully aligned on the new codes for summer and fall learning.

4. Data Collection Time Frame and Planned Updates

Coders collected data for the initial round of coding between April 6 and May 1, 2020. Analysts quality-checked the data and made updates for missing data during the week of May 4, 2020.

Appendix C. Code Methodology (cont.)

Our team plans to re-code the districts with the additional summer and fall codes, and quality-check the codes between May 25 and June 12, 2020.

5. Definition of Codes

Attachment A is the codebook for the first round of coding. For all indicators, codes were based only on publicly available information, and when there was no information available, were coded “no” or “negative.”

Codes for summer and fall learning, which will be used in the re-code of the database, were still in development through the week of May 18. There will also likely be some changes to the original codebook on the attendance codes and the “district delegation” codes.

6. Explanation of the Sample and Sample Calibration

The Sample

The national sample includes two groups of districts.

Group 1 includes 399 districts and is a stratified random sample from a sample of 1,200 school districts. The 1,200 school districts represent the recruitment sample for the RAND-led American School District Panel project, a project intended to build a nationally representative panel of American School Districts. The sample of 399 districts is stratified by school location and includes 200 small-town and rural districts and 199 suburban and urban districts.

Group 2 includes the 82 urban districts CRPE began collecting district response data in March 2020. CRPE updated data on these districts weekly from March 28, 2020, through the period of time when CRPE completed data collection on the national sample.

Because 3 of the 82 large urban districts also appear among the 399 districts, and one is in Canada, the total national sample includes 477 U.S. school districts.

Calibration and Sample Weights

Excluding the duplicates, we combined the Group 1 and Group 2 districts and then calibrated to reflect the national population of school districts along 10 factors:

- Total enrollment in the district split into 3 groups: Small [0-800], medium [800-3000] and Large [3000+]
- Total number of schools in the district split into 3 groups: 1, [2-5], and [6+]
- Per-pupil expenditure on instructional materials
- Current expenditure dollar range code represents per-student current expenditures within ranges and are maintained on district (except Supervisory Union) and public school records
- Percentage of minority students in the district split into four groups [0-15%], [15-25%], [25-50%], and [50%+]
- Percentage of poverty level students in the district split into four groups [0-10%], [10-15%], [15-25%], and [25%+]
- Percentage of free / reduced-price lunch students in the district split into four groups [0-25%], [25-50%], [50-75%], and [75%+]
- The specific level of instruction in the school district, Elementary, Secondary or Unified
- The percentage of special education students in the district split into [0-12%], [12-17%], and [17%+]
- Bilingual Education Indicator that indicates if Bilingual Education is offered [Yes/No]

EXHIBIT "16"

EXECUTIVE ORDER N-73-20

WHEREAS deploying affordable and reliable broadband networks throughout California will accelerate continuous improvements in economic and workforce development, infrastructure, public safety, education, economy, and an engaged citizenry; and

WHEREAS broadband access, adoption, and training are essential components of digital equity for California's diverse populations; and

WHEREAS over 2,000,000 Californians do not have access to high-speed broadband service at benchmark speeds of 100 megabits per second download, including 50 percent of rural housing units; and

WHEREAS as of December 2018, 23 percent of California housing units, housing 8.4 million residents, do not have broadband subscriptions; and

WHEREAS despite the increasing importance of broadband for employment, health, public safety information and community connections, 34 percent of adults 60 and over do not currently use the Internet; and

WHEREAS the COVID-19 pandemic has amplified the extent to which broadband is essential for public safety, public health, and economic resilience; and

WHEREAS the COVID-19 pandemic has caused schools to shift to distance learning; and

WHEREAS telehealth greatly expands the ability of Californians to access medical, behavioral and oral health services, and has been prioritized across health systems during the COVID-19 pandemic, yet not all Californians have access to sufficient broadband to allow live video connections; and

WHEREAS effective emergency services require using broadband infrastructure to integrate data in real time from all available sources so decision makers at the local, regional, and statewide level have access to the information necessary for the protection of lives and property; and

WHEREAS local and tribal governments play a critical role in understanding the broadband needs of their communities and in infrastructure planning and permitting.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the power and authority vested in me by the Constitution and statutes of the State of California, do hereby issue this Order to become effective immediately.

IT IS HEREBY ORDERED THAT:

1. California state agencies subject to my authority are directed to pursue a minimum broadband speed goal of 100 megabits per second download speed to guide infrastructure investments and program implementation to benefit all Californians.
2. The California Broadband Council is requested to create a new State Broadband Action Plan by December 31, 2020, and to review the plan annually thereafter. The California Department of Technology's Office of Broadband and Digital Literacy is directed to support and monitor implementation of the Plan and this Executive Order. The Plan shall incorporate the 100 megabits per second goal, and include the following elements:
 - a. A roadmap to accelerate the deployment and adoption of broadband by state agencies and to support such deployment and adoption by local governments.
 - b. Publicly accessible information on all federal and state funding opportunities and eligibility requirements.
 - c. Provisions to maximize the inclusion of tribal lands in all broadband access and adoption opportunities developed in consultation with tribal governments.

MAPPING AND DATA

3. The California Public Utilities Commission (CPUC) is requested to lead data aggregation and mapping efforts in collaboration with the California State Transportation Agency (CalSTA) and other relevant state agencies, local and tribal governments, and regional consortia. These efforts should address:
 - a. Locations without broadband access;
 - b. Information on public and private broadband network infrastructure;
 - c. State-owned infrastructure and rights of way;
 - d. The costs of deploying various middle and last-mile network components; and
 - e. Information to support the development of local broadband infrastructure deployment and digital equity plans.
4. The California Department of Technology (CDT), in collaboration with the Governor's Office of Business and Economic Development (GO-Biz) and the Department of General Services (DGS), is directed to regularly convene private-sector companies in an effort to understand and predict current and future demand for broadband, for the purpose of enabling the State to more effectively allocate resources and manage policies and

programs supporting broadband goals and continuing the State's leadership in broadband innovation.

FUNDING

5. GO-Biz is directed to identify funding opportunities for broadband deployment and adoption by:
 - a. Collaborating with all cabinet-level agencies, independent departments, and independent constitutional officers to create a list of funding sources to support broadband, equipment, and digital literacy; and
 - b. Coordinating efforts of state agencies to maximize federal broadband funding for California.
6. CDT, in collaboration with DGS, is directed to seek opportunities to leverage the State's contract authorities as resources to further statewide broadband access and adoption.

DEPLOYMENT

7. CalSTA and California Department of Transportation (Caltrans) are directed to work with the California Transportation Commission (CTC) to identify and incorporate the installation of conduit and/or fiber into all appropriate and feasible transportation projects along strategic corridors.
8. CPUC, in collaboration with CDT and other relevant agencies, is requested to seek opportunities to use programs under its jurisdiction to accelerate broadband deployment and to leverage utility infrastructure to increase access to existing fiber and cost-effectively deploy new fiber.
9. DGS is directed to provide an inventory of state property for possible use for broadband infrastructure based on such criteria as may be provided by the CPUC, Caltrans, and other relevant agencies, to accelerate broadband deployment.
10. The Governor's Office of Emergency Services (CalOES) is directed to coordinate with jurisdictions implementing Next-Generation 9-1-1 to expand broadband infrastructure to enhance public safety and disaster preparedness, response, recovery, and mitigation capabilities.
11. The California Department of Food and Agriculture (CDFA) is directed to identify and facilitate new broadband projects that support precision agriculture and food systems in rural communities. CDFA is also directed to work with CalOES to inventory the status of existing broadband connectivity at all fairgrounds.
12. The California Department of Housing and Community Development and the California Housing Finance Agency are directed to provide recommendations to the CPUC to increase free or low-cost broadband connectivity at all publicly subsidized housing communities for residential units.

ADOPTION

13. GO-Biz is directed to coordinate the outreach efforts of existing statewide programs and institutions to inform residents of affordable Internet service offerings, including:
- a. The CPUC is requested to develop tools for low-income individuals and social service organizations to easily identify and subscribe to affordable broadband plans;
 - b. The California Emerging Technologies Fund is directed to continue promoting affordable home Internet service offers to recipients of the National School Lunch Program; and
 - c. The California State Library, in consultation with local libraries, is directed to promote affordable home Internet services within their communities.
14. The California Department of Education is requested to continue leading statewide efforts to ensure that students have the computing devices and connectivity necessary for distance learning and online instruction.
15. The California Department of Aging, in partnership with CDT and CPUC, is directed to analyze the needs of people ages 60 and older for access to affordable, reliable, high-speed broadband, and to identify program and partnership opportunities to close the digital divide among older Californians.

IT IS FURTHER ORDERED that, as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 14th day of August 2020.

GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

EXHIBIT “27”

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7 Attorneys for **Defendants Immanuel Schools**
and Ryan Wood
8

9
10 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
11 **FOR THE COUNTY OF FRESNO**

12 COUNTY OF FRESNO through JEAN M,
13 ROUSSEAU, in his official capacity as
Emergency Services Director and County
14 Administrative Officer

15 Plaintiff,

16 v.

17 IMMANUEL SCHOOLS., a California non-
profit corporation; RYAN WOOD, Chief
18 Executive Officer of Immanuel Schools and
DOES 1 through 50, inclusive,

19 Defendants.
20

Case No.: 20CECG02447

DECLARATION OF ALBERT C. MU,
D.O. IN SUPPORT OF OPPOSITION TO
TEMPORARY RESTRAINING ORDER

Ex Parte

Date: August 25, 2020

Time: 3:29 p.m.

Dept. 501

21 I, ALBERT C. MU, the undersigned, declare as follows:

22 1. I am over the age of 18 years and I am not a party to this action. I make this
23 declaration based on my own personal knowledge, my professional experience and professional
24 writings from sources known to be reliable and reputable sources in my field of expertise. If called
25 as a witness, I could and would testify competently to the matters set forth herein.

26 2. I submit this declaration in support of the Opposition to Temporary Restraining
27 Order.
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3. I obtained my D.O. from the College of Osteopathic Medicine of the Pacific and performed my residency at Loma Linda University. I am a board-certified family physician. I believe that Immanuel schools in Reedley, California should specifically be allowed fair consideration by the County Department of Public Health and State of California for an exemption to remain open for in-person classroom instruction. Attached hereto as **Exhibit "28"** is a true and accurate copy of a letter I sent to the Board of Supervisors for Fresno County. The letter contains a brief summation of my professional opinion based on the data available at the time it was written.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and accurate.

Executed August 24, 2020 at SANGER, California


Albert C. Mu, D.O.

EXHIBIT “28”

August 16, 2020

To the Board Chair of the Fresno County Board of Supervisors,
Honorable Mr. Buddy Mendes,

I write to petition your thoughtful consideration to allow on campus education for Immanuel Schools. The SARS-CoV2 pandemic has created exceptional fear, confusion and uncertainty. With cases rising in Fresno County I understand the position of Fresno County Public Health Department, as well as the State of California to threaten shut down of the school, but I must disagree with their decision, given the data that is available to me as of the time this is written. I appreciate you taking the time to read my thoughts on why, as a Board-certified Family Physician, I am compelled to send my children to school.

To my knowledge, the state of California and Fresno County have no plan as to when this will end – only fluctuating mitigation strategies – which add to the panic and fear. Everything is uncertain: when to reopen all businesses, when masks will no longer be required, whether society will *ever* go back to normal, and in our case, when to reopen schools. Certainly these are difficult decisions. But what are these decisions to be based on? I propose that they be driven by the facts available to us. As briefly as I can, I want to discuss why true mortality rates (which are driving mass fear amongst adults) are misrepresented, and why children should be allowed on campus again for school.

As of 8/15/2020, the County of Fresno Public Health Department website has reported 19,900 PCR confirmed cases of SARS-CoV2 with 203 deaths. This is a mortality rate of 1%, or 1 in 100. Statistics such as these have greatly increased anxiety and fear levels within our local population. Medically, however, it is irrational to assume that only the PCR positive tests represent the true number of infected persons. The available numbers do not fairly depict the true risk level. The COVID-19 mortality rate is significantly lower. To get a better understanding we need information provided via antibody testing.

Neither the State of California nor Fresno County Department of Public Health, to my knowledge, have done or proposed any studies to answer the true infection rate via antibody testing, though our neighbors to the north and south have done so. Being that we are in between two of the largest population densities in the country, the SF Bay Area and Los Angeles, we are naturally affected by their COVID statuses. And their results corroborate each other very closely. A study conducted by USC/LA County using antibody testing in April/May 2020 and published in the Journal of the American Medical Association (JAMA) showed that based on positive antibodies to COVID-19 in healthy volunteers, the infection rate was approximately **40-50 times higher** than PCR testing alone indicated.

Corroborating USC's data, Stanford University researchers determined the antibody prevalence in Santa Clara County to be **50-85 times higher** than what PCR

testing alone could detect. The following is a quote from the research paper published by Dr. Jay Bhattacharya and colleagues: "After weighing for population demographics of Santa Clara County, the prevalence [of antibodies to SARS-CoV2] was 2.8%. These prevalence point estimates imply that **54,000 people were infected in Santa Clara County by early April, many more than the approximately 1,000 [PCR-only] confirmed cases at the time of the survey.** Conclusion: The estimated population prevalence of SARS-CoV2 antibodies in Santa Clara County implies that the infection may be much more widespread than indicated by the number of [PCR only] confirmed cases."

This is consistent with other large counties in the U.S. Among the 10,000 employees of the Major League Baseball Study who were tested for COVID-19 antibodies, numbers of positive antibody results were lower, but notably **70% of those who tested positive were asymptomatic and healthy.**

One can debate all day about study limitations and critiques, but there is no such thing as a study ever done that is above criticism, especially in medicine. Furthermore, I do not know of any government plan to answer these questions that are essential for moving our society forward. The point is, if we factor in these two studies from USC and Stanford performed by outstanding, reputable institutions, and apply it, conservatively, to the mortality rate here in Fresno County, it brings the actual mortality rate in our county far lower than that earlier 1% calculated on PCR testing alone. **I am left to logically conclude the rate of mortality from COVID-19 is very likely pushed much lower down, likely closer to that of influenza: ~1 in 1000, or 0.1%.**

To further corroborate my thinking, the CDC estimated, early on in the pandemic that the actual number of infections in most places was more than 10 times the reported testing numbers, which would also place the local mortality rate at 1 in 1000, on par with seasonal influenza. To my knowledge, the State of California, nor any County Public Health Department has never shut down the school system, business and societal function on account of seasonal influenza, not even when the unknown, but underreported, H1N1 struck in 2009. That public health emergency resulted in **60 million** cases in the US by CDC estimates and a significant **358 pediatric deaths ensued, two-three times higher than usual.** Children were not kept out of schools. To date we have **5.4 million cases** of COVID-19 in the US, but we have prevented our children from attending school in person.

The data available to us demonstrate that the benefits outweigh the risks of sending our children back to school. Children comprise 22% of the US population yet make up 7% of all COVID cases. Our current data also conclude that severity in pediatric patients is extremely low. Children make up only 3% of COVID-19 hospitalizations, and death is rare (ranging from 0 to 0.5% depending on the state). This is a very conservative estimate as no large-scale antibody studies have been conducted on children, which likely means as I argued earlier, that the pediatric death rate is much lower. From data obtained from COVID-NET, a collaborative

database studying pediatric hospitalizations throughout multiple states, pediatric hospitalization rates are 8 in 100,000. That means 99,992 children in 100,000 would recover. As I write this letter, more children have died from seasonal influenza in each of the past five seasons (3 month time periods) than this year's 5+ month COVID season, and again, schools have never shut down in our lifetime on account of influenza. The majority of children who had to be hospitalized had underlying medical conditions and 1 in 3 who are hospitalized are admitted to the ICU (the same as adults) so I advocate children with such pre-existing conditions should consider distance learning online. This is precisely what Immanuel Schools has offered to all enrolled families. In Fresno County I lament that one precious child has succumbed to the disease, but we do know this child had severe predisposing medical conditions. As a physician but also as a father, I ask that you will not keep all our children out of school due to fear, when the numbers tell us that the death rate is so low.

From a community standpoint, the most updated data show children may have similar nasopharyngeal viral loads and are able to spread the virus (no surprise) but we have **no evidence that children are the primary drivers of infection** as with other common viruses. This data came as a great surprise to myself and many others, and is being widely discussed amongst the medical and scientific community, but **that is why we must study such things and base decisions accordingly.**

In medicine, as in public policy, what do we base our decisions on? I cannot know everything but I try my hardest to practice evidence-based medicine. It is my obligation to the public and my patients. I must do my best to stay afloat with changing knowledge and the use of statistics, aware of their limitations, as tools to help guide me in discussions with patients so they have the best evidence to make decisions on their health. Likewise, should not the decision on keeping Immanuel Schools open be based on evidence-based information as well? Many academic and governing institutions, including the CDC, have made the argument that schools should reopen, especially for the subgroup under 18 years old. Why, then is Immanuel being threatened to shut down? With the data presented above, I see no evidence-based reason why the government should take action against my children's school.

My request is based on data from: the Centers for Disease Control, the Johns Hopkins University of Medicine Coronavirus Tracker, the American Academy of Pediatrics, the Infectious Diseases Society of America, the Journal of the American Medical Association, and the Fresno County Department of Health. These statistics are available publicly.

Thank you for your valuable time and thoughtful consideration.

Regards,
Albert C. Mu, D.O.

EXHIBIT “29”

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and Ryan Wood
8

9
10 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
11 **FOR THE COUNTY OF FRESNO**

12 COUNTY OF FRESNO through JEAN M,
13 ROUSSEAU, in his official capacity as
Emergency Services Director and County
14 Administrative Officer

15 Plaintiff,

16 v.

17 IMMANUEL SCHOOLS., a California non-
profit corporation; RYAN WOOD, Chief
18 Executive Officer of Immanuel Schools and
DOES 1 through 50, inclusive,

19 Defendants.
20

Case No.: 20CECG02447

**DECLARATION OF PAUL ATMAJIAN
IN SUPPORT OF OPPOSITION TO
TEMPORARY RESTRAINING ORDER**

Ex Parte

Date: August 25, 2020

Time: 3:29 p.m.

Dept. 501

21 I, PAUL ATMAJIAN, the undersigned, declare as follows:

22 1. I am over the age of eighteen years and I am not a party to this action. I am a licensed
23 M.D. I make this declaration based on my own personal knowledge and if called to testify as a
24 witness I could and would testify competently thereto.

25 2. I make this declaration in support of the Opposition to the Temporary Restraining
26 Order.

27 3. I have been licensed to practice medicine in the State of California since October 1,
28 1991. I obtained my bachelor's degree in physics from California State University, Fresno. I

1 obtained my M.D. degree from UCLA. My internship was in pediatrics. During my medical
2 training I took one year off to be a medical volunteer in Armenia.

3 4. After volunteering in Armenia, I completed a residency in clinical pathology at Yale
4 New Haven Hospital. Clinical pathology relates to blood diseases, diagnostic chemistry, diagnostic
5 immunology, blood banking, and molecular diagnostics, among other topics. In order to complete
6 the residency program, I had to develop at least one test that could be used in the Yale New Haven
7 Hospital lab.

8 5. After completing my residency at Yale New Haven Hospital, I completed a
9 fellowship in hematopathology at UC Davis. Hematopathology is the study of blood, clotting,
10 lymph nodes, spleen, and related illnesses. During my fellowship, I developed a Western Blot
11 method for the identification of translocations common to Burkitt's lymphoma. After completing
12 my fellowship at UC Davis, I stayed an additional two years and trained in surgical pathology,
13 which, at a practical level, primarily involves the microscopic interpretation of biopsies.

14 6. After completing the education and training described above, I worked as a general
15 pathologist for approximately 20 years. I was also the laboratory director for the Reedley Hospital
16 lab, the Selma Hospital lab, and the Fresno Surgical Hospital for several years. In short, I have
17 dedicated the majority of my medical career to blood tests and interpretation of biopsies for purposes
18 of diagnosing and combatting diseases including infectious diseases.

19 7. I conducted testing for antibodies directed to SARS-CoV-2, commonly referred to
20 as Covid-19 or the novel coronavirus ("Covid-19") using blood samples obtained at petitioner
21 Immanuel School's campus. Meaning, I was testing for individuals that had either already
22 contracted and defeated Covid-19 or were immune to Covid-19. I conducted the testing between
23 August 4, 2020 and August 13, 2020 by enzyme linked immunosorbent assay (ELISA).

24 8. The ELISA method I use for my testing is not unique. The basic method is well-
25 known and accepted within the medical and research communities. The ELISA is considered by
26 many to be the gold standard, although very time consuming and relatively expensive. The detailed
27 method upon which I based my test was published by researchers and medical professionals

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1 screening populations in Germany and New York City. I have attached a true and accurate copy of
2 the published screening protocol as **Exhibit “30”** to my declaration.

3 9. I modified the test and implemented steps to increase the sensitivity and specificity
4 of the test. I conduct my testing to RBD and S1 proteins at 37 degrees Celsius, which is body
5 temperature. I found by experimentation that conducting Covid-19 testing to detect IgG antibody
6 directed to RBD and S1 proteins at body temperature gave the best results. I am uncomfortable using
7 a test looking for IgG to those protein targets which is not conducted at normal body temperature.

8 10. I also found from my own observations that every person’s immune system may
9 respond differently in regard to antibody production upon infection with Covid-19. Each person
10 who is exposed to Covid-19 and overcomes the illness may develop antibodies to one or more of
11 the multiple antigenic targets on the virus. I am unable to predict the pattern. I know of cases in
12 which a whole family was infected, and a parent tested PCR+. The whole family was sick at the
13 same time, to varying degree, and all eventually recovered, usually children first, then parents. But
14 one month later, when everyone should have antibodies according to common wisdom, I could find
15 antibodies to one or more common antigenic targets in a parent’s blood, but not in a child’s blood.
16 I believe that not all the possible antigenic targets are known or understood yet. I believe that how
17 children respond to infection with Covid-19 is not fully known or understood yet. Therefore, it is
18 important to use more antigens in testing. I used three antigens in the research for Immanuel schools.

19 11. I don’t produce my own recombinant proteins. I purchase recombinant proteins, S1,
20 RBD, and N, from Raybiotech Inc., which is a highly specialized reputable company within the
21 medical research industry—to ensure consistency of the proteins from lot to lot. I also purchase
22 antibody conjugates from them.

23 12. I don’t use dry milk as blocking agent although it is cheap; I found that 1.5%
24 Hammarsten Grade Casein works best, and that 5% ultrapasteurized lactose free fat free milk is
25 second best, with less nonspecific background. When I tested random patient samples against the
26 blocking agent alone, I found some persons had a reaction to something in the dry milk which might
27 lead to poor results. I also do not rely completely on the automatic plate washer. I found that
28 striking off after each wash gave cleaner results than only striking off after a cycle of 3 or 4 washes.

1 Some details of my modified test are included on page 2 of a letter I drafted and sent to Immanuel
2 School on or about August 13, 2020. A true and accurate copy of this letter is attached to this
3 declaration as **Exhibit “31”**.

4 13. To be clear, the changes I made to the protocol published by Stadlebaeur and others
5 only serve to improve it.

6 14. My test reporting methodology is a more stringent version of the aforementioned
7 published protocol. To test positive for Covid-19 antibodies with my test, I looked for either a
8 positive antibody result to two of the three antigens (114/198), or a positive antibody result to a
9 single antigen that is just simply too high to be ignored (2/198). With two exceptions, if a person
10 had antibody to only one antigen, I did not count that positive in my final reporting. This is because
11 so much is still unknown about Covid-19 that I wish to be very strict in final result reporting.

12 15. Furthermore, in testing the school population, I saw nothing to be gained by
13 sacrificing specificity for more sensitivity. If Covid-19 went through the school at a time when
14 there were no precautions in January or February 2020, we must expect a dramatically high number
15 of people to still have some detectable antibodies. The published figures for general populations
16 (not cruise ships or nursing homes) have typically been between 1 and 10 percent. It is common
17 laboratory practice to set test cutoff values to achieve a desired sensitivity and specificity. However,
18 a population exposure is not a matter of a few percent one way or another; it is a very dramatic
19 event. Therefore, for the intended purpose and for this project, I believe I was justified in being
20 very strict in the final reporting.

21 16. During my test development, a local Blood Center gave me samples from
22 previously PCR+ convalescent plasma donors and others; in return, I performed a titer for each one
23 of those samples. Titers showed previously minimally symptomatic plasma donors recovered from
24 Covid-19, could produce more antibodies than previously hospitalized patients. Subjective or
25 objective degree of illness does not appear to be correlated with the amount of antibody produced
26 or persisting after some months. It is not at all unusual that persons who did not feel sick, or were
27 not sick enough to be hospitalized, produce antibodies detectable months after exposure.

28

1 17. My modified version of the test is easily re-creatable and can be conducted by a
2 fully trained medical or research laboratory professional in a properly equipped high level
3 laboratory. The reporting methodology may be adapted to suit the intended purpose.

4 18. I would expect that any research grade ELISA test, or a traditional FDA approved
5 test, proven over time (in contrast to most of the emergency use approved tests which were failures
6 and/or had their emergency use approvals withdrawn), will still be able to detect antibodies to all
7 three of the antigens I used, several months after a primary infection, when the test is properly
8 performed by skilled laboratory professionals. Given the highly disappointing experience of the
9 nation with antibody tests given only Emergency Use Authorization, I would not expect any useful
10 result from those kinds of tests.

11 19. Immanuel School administration and parents reported symptoms of Covid-19
12 infection around February 2020. I tested 198 individuals who had their blood drawn at Immanuel
13 School on August 4, 2020. My test showed a 59% positive rate for Covid-19 antibodies after 5
14 months. Because of the nature of Covid-19, I believe with reasonable medical certainty that if
15 anyone in a household tested positive, with no precautions having been taken (as was the case in
16 February 2020), the others in the household were likely exposed; this factor would raise the
17 exposure rate to higher than 59% of all individuals. Attached hereto as **Exhibit “32”** is a true and
18 accurate copy of a spreadsheet I created documenting the results of the 198 samples I took from
19 Immanuel School. The results in the spreadsheet accurately reflect the lab findings from the samples
20 from the Immanuel School testing project.

21 20. After I finished my work on the morning of August 13 and sent my final reports to
22 Mr. Wood, I made a reasonable attempt to share my findings with the CDC, the Department of
23 Public Health lab, and a presumed State of California lab. I was unable to reach the CDC after 4
24 attempts; their published phone number was always busy. I telephoned the Fresno County
25 department of Health and asked to speak to the laboratory director. According to the Department of
26 Public Health’s representative who answered the phone, the lab was destroyed by flooding. I was
27 not connected to any lab staff. I asked if important or special cases were sent to a state lab or directly
28 to the CDC. I was provided with a telephone number for the State lab reportedly located in

1 Richmond, California. However, when I called the phone number given me for Richmond, I reached
2 a voicemail and so had to leave a message. I have not received a return call. I would very much
3 have liked to compare my results from the testing of the Immanuel Schools population with all the
4 school population testing results that the California State laboratory may have completed in the last
5 6 months, but I was unable to reach anyone at the number I was given who could help me.


6 21. The samples are still within my control and are being refrigerated. I am willing to
7 share the samples with public agencies and/or medical professionals who are capable of the highest
8 level of laboratory work, so they can replicate and confirm my findings. I am also willing to share
9 my detailed modified procedure with other medical professionals.

10 22. It is my professional medical opinion that Covid-19 spread unfettered through the
11 Immanuel School community in early 2020 and that the Immanuel School achieved natural herd
12 immunity to Covid-19. No vaccine has been available, and the antibody responses can therefore not
13 be a result of vaccination. It is also my opinion that no rational or scientific basis has ever existed
14 to conclude that no school populations experienced Covid-19 before the shelter in place orders. It
15 is a statistical improbability that no schools ever experienced the spread of Covid prior to school
16 closures.

17 23. I have begun the process of writing up the research work for publication in a
18 reputable medical journal.

19 I declare the following is true and accurate under penalty of perjury under the laws of the
20 State of California.

21 Executed August 24, 2020 at Reedley California.

22 
23 Paul Atmajian, M.D.

24
25
26
27
28

EXHIBIT “30”

1 **A detailed protocol for a serological assay to detect SARS-CoV-2**
2 **seroconversion in humans: antigen production and test setup**

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18
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20 #contributed equally
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29 **Abstract**

30 In late 2019, cases of atypical pneumonia were detected in China. The etiological agent was
31 quickly identified as betacoronavirus (named SARS-CoV-2) which has since caused a pandemic.
32 Several methods allowing for the specific detection of viral nucleic acids have been established
33 but only allow detection of the virus during a short period of time, generally during acute infection.
34 Serological assays are urgently needed to conduct serosurveys, to understand the antibody
35 responses mounted in response to the virus and last but not least for identifying individuals who
36 are potentially immune re-infection. Here we describe a detailed protocol for expression of
37 antigens derived from the spike protein of SARS-CoV-2 that can serve as substrate for
38 immunological assays as well as a two-step serological enzyme-linked immunosorbent assay
39 (ELISA). These assays can be used for research studies as well as for testing in clinical
40 laboratories.
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Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes **CO**rona**VI**rus **D**isease 2019 (COVID19), emerged in late 2019 in Wuhan, China^{1,2}. The virus rapidly spread globally causing a pandemic. Currently, no drugs or antivirals are available and countermeasures are limited to non-pharmaceutical interventions (NPIs). Nucleic acid-based tests for detection of the virus during acute disease are in use worldwide^{3,4}.

However, the development of serological assays has been lagging behind due to lack of suitable reagents. Serological assays are needed to perform serosurveys aimed at determining the real infection rate and infection fatality rate in a given population. Furthermore, they are useful to characterize the immune response to the virus in a detailed qualitative and quantitative manner. In addition, serological assays are also of immediate practical use. They can be used to identify individuals who were infected (including severe, mild and asymptomatic cases) and who are now potentially immune. A recent study in non-human primates showed that reinfection, at least in the small number of animals used in this study, does not occur⁵ once antibody responses have been mounted. Infection with coronaviruses circulating in human populations such as HKU, NL63 etc. also leads to immunity that protects from re-infection for months to years⁶. Therefore, individuals

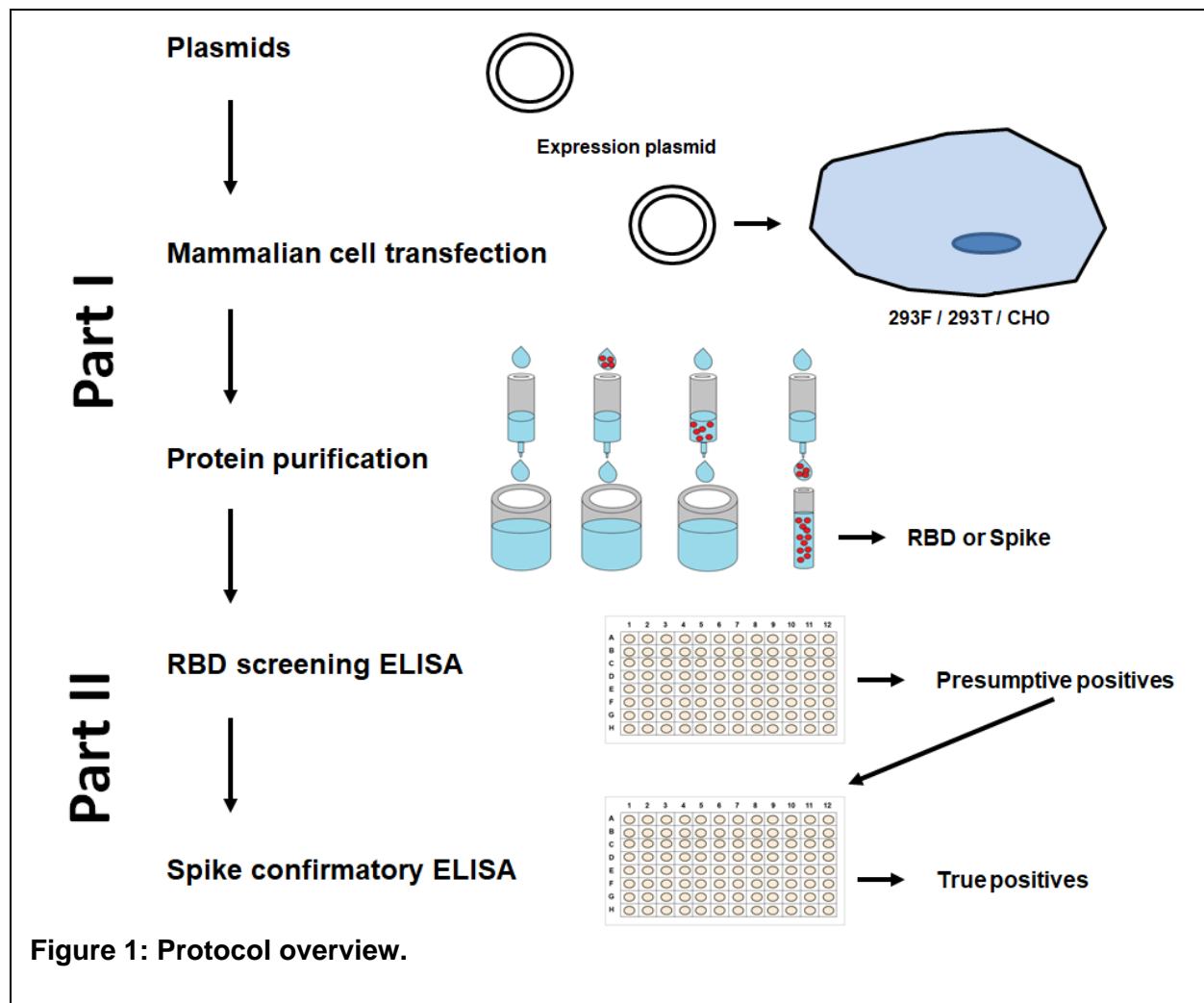


Figure 1: Protocol overview.

66 who have mounted an immune response to SARS-CoV-2 are likely immune, which means that
67 they are unlikely to transmit the virus to others. As an example, health care workers who are
68 immune can take care of COVID19 patients with minimal risk to themselves, their colleagues and
69 other patients. In addition, the use of convalescent serum may serve as valuable treatment option
70 for patients with severe COVID19, especially in the absence of other options. A serological assay
71 is critical for identifying potential blood donors.

72 The surface glycoprotein of the virus, termed spike (S) protein, mediates attachment of the virus
73 to human cells via its receptor binding domain (RBD)⁷ and mediates fusion of viral and cellular
74 membranes. Antibodies that bind to the spike protein, and especially to the RBD domain, can
75 neutralize coronaviruses. We used, therefore, different recombinant spike protein preparations as
76 antigen for our ELISA. We reported in our earlier work that individuals not exposed to SARS-
77 CoV-2 are completely naïve for the spike protein and show no reactivity in an ELISA⁸. It is,
78 therefore, easy to distinguish between exposed/immune and naïve people.

79 In this report, we provide detailed protocols for expressing the needed antigen(s) (**Part I**) as well
80 as for setting up the ELISA that we have developed (**Part II**) (**Figure 1**). We believe that this
81 protocol will be useful not only for research laboratories around the globe but also for testing in
82 diagnostic/clinical laboratories. The described protocol setup works well for us but it can easily be
83 modified, adapted to local needs and improved by the research community in the future.
84 Mammalian expression plasmids for the generation of the recombinant proteins are available from
85 the corresponding author.

86

87 **Part I: Mammalian cell transfection and protein purification protocol**

88

89 This protocol can be used for both expression vectors for the secreted RBD as well as a soluble
90 trimeric version of the SARS-CoV-2 spike protein. Expression levels of the RBD are very high in
91 our hands (>20 mg/l culture) while expression levels for the full length spike are lower
92 (approximately 1 mg/ml). Therefore, we use the recombinant RBD for initial screening ELISAs
93 and the full length spike for confirmatory ELISAs (as described in **Part II**). Preparation of plasmids
94 for mammalian cell expression is not described here. The plasmids all carry a betalactamase
95 (amp) resistance gene. They are grown in *E. coli* at 37°C (or 30°C) in shaker flasks over night.
96 High quality plasmid DNA can be obtained using commercially available maxiprep kits (ideally
97 with an endotoxin removal step). Importantly, other cell lines (293T, CHO etc.), other media,
98 transfection reagents and more sophisticated protein purification methods might be used as
99 alternatives. Of note, cells can also be transfected in regular flasks in regular incubators without
100 shaking.

101

102 **MATERIALS**

- 103 ● Expi293 Expression Medium (Gibco #A1435102)
- 104 ● Opti-MEM™ I Reduced Serum Medium (Gibco #31985088)
- 105 ● ExpiFectamine™ 293 Transfection Kit (Gibco #A14524)
- 106 ● PBS (1X) (Gibco #10010-023 or equivalent)
- 107 ● Ni-NTA Agarose (Qiagen #30230 or equivalent)
- 108 ● SDS-PAGE gels (Bio-Rad #4561094 or equivalent)
- 109 ● SDS-PAGE cell and power supply
- 110 ● Sodium phosphate monobasic monohydrate NaH₂PO₄ · H₂O (Sigma Aldrich #S3522 or
111 equivalent)
- 112 ● Sodium Chloride NaCl (Sigma-Aldrich #S3014 or equivalent)
- 113 ● Imidazole (Sigma-Aldrich #I5513 or equivalent)

- 114 ● Disposable Polycarbonate Erlenmeyer Flasks (Corning #431147)
- 115 ● Trypan blue solution, 0.4 % (Gibco #15250-06 or equivalent)
- 116 ● Cell counting slides (Invitrogen #C10312 or equivalent)
- 117 ● 5mL Polypropylene columns (Qiagen #34964 or equivalent)
- 118 ● Amicon™ Ultra Centrifugal Filter Units 10 kDa (MilliporeSigma #UFC901024 or
- 119 equivalent)
- 120 ● Amicon™ Ultra Centrifugal Filter Units 50 kDa (MilliporeSigma #UFC905024 or
- 121 equivalent)
- 122 ● Polypropylene sterile conical tubes
 - 123 ○ 15 mL (Denville Scientific #C1018P or equivalent)
 - 124 ○ 50 mL (Fisher Denville Scientific #C1060P or equivalent)
- 125 ● Sterile, serological pipettes
 - 126 ○ 5mL (Falcon #356543 or equivalent)
 - 127 ○ 10mL (Falcon #357551 or equivalent)
 - 128 ○ 25 mL (Falcon #357535 or equivalent)
 - 129 ○ 50 mL (Falcon #356550 or equivalent)
- 130 ● Micropipette tips
 - 131 ○ 20 µL barrier tips (Denville Scientific #P1121 or equivalent)
 - 132 ○ 200 µL barrier tips (Denville Scientific #P1122 or equivalent)
 - 133 ○ 200 µL tips (USA Scientific #1111-1700 or equivalent)
 - 134 ○ 1000 µL barrier tips (Denville Scientific #P1126 or equivalent)
- 135 ● 1.5 mL Eppendorf tubes (Denville #C2170 or equivalent)
- 136 ● Stericup Quick Release-GP Sterile Vacuum Filtration System (MilliporeSigma
- 137 S2GPU05RE or equivalent)
- 138 ● Pipet-Aid
- 139 ● Micropipettes
- 140 ● Class II biological safety cabinet
- 141 ● Timer
- 142 ● Countess II cell counter or equivalent
- 143 ● CO₂ incubator with built in shaker (Eppendorf New Brunswick S41i or Equivalent)
- 144 ● Benchtop shaker (Benchmark #BT3000 or equivalent)
- 145 ● Cooling Centrifuge (Eppendorf 5810R or equivalent)
- 146 ● Refrigerator at 4°C (+/- 1°C)
- 147 ● Ultra-Low Freezer (-80°C)

148 DEFINITIONS

- 151 ● RBD = Receptor Binding Domain of SARS-CoV-2 (NR-52306)
- 152 ● PBS = Phosphate-Buffered Saline
- 153 ● RT = Room Temperature (18-25°C)
- 154 ● MEM = Minimum Essential Medium
- 155 ● DNA = Deoxyribonucleic Acid
- 156 ● Ni-NTA = Nickel-Nitrilotriacetic acid

157 PROCEDURE:

- 158
- 159
- 160 **Transfection in mammalian cells:**

161 HEK 293F cells are counted using an automated cell counter (or a regular counting chamber) and
162 seeded at a density of 600,000 cells/ml in Expi293 expression medium. The viability of the cells
163 must be greater than 90% at all times. Cells are passaged every 3-4 days and incubated in an
164 orbital shaking incubator at 37°C and 125 RPM with 8% CO₂. A maximum cell density of 4-5 x
165 10⁶ cells/ml is recommended and at this point, cells should be immediately passaged.

166 Transfections are performed according to manufacturer's instructions. 600 x 10⁶ cells are
167 suspended in 200 ml of Expi293 expression media in a 1 L shaker flask. Twelve ml of Opti-MEM
168 is added to two 50 ml falcon tubes: one tube receives 200 ug (1 ug/ul) of respective plasmid DNA
169 (for RBD or full-length spike) while the other tube receives 640 ul of ExpiFectamine transfection
170 reagent. The contents of both the 50 ml Falcon tubes are mixed together and incubated at RT for
171 10 minutes after which the transfection mixture is added dropwise to the cells. Cells are then
172 returned to the shaking incubator. Sixteen hours post transfection, 1.2 ml of Expifectamine 293
173 Transfection Enhancer 1 and 12.1 ml of Expifectamine 293 Transfection Enhancer 2 is added to
174 the culture and subsequently, the culture is returned to the shaking incubator.

175 Three days post-transfection, the cells are harvested and spun at 4,000g for 20 minutes at 4°C.
176 The supernatant is filtered using a 0.22 um stericup filter, the cell pellet can be discarded.
177 Alternately, cells can be spun at 200g for 10 minutes, supernatant can be collected, and the same
178 cells can be resuspended in 200 mls of fresh Expi293 expression medium and returned to the
179 shaking incubator for another 3 days. This alternate strategy works well with the RBD but is less
180 suitable for the full-length spike (we have detected protein degradation in that case).

181 Ideally is the supernatant containing the protein is further processed immediately. Alternatively, if
182 it is stored, it must be kept at 4°C (and for no longer than overnight/16h) in order to prevent
183 denaturation of the protein at room temperature.

184

185 **Protein purification via gravity flow:**

186 *Note: This step can be substituted with more advanced purification methodology if e.g. an Aekta*
187 *purifier is available. The methods described below work, even in labs not geared towards protein*
188 *purification.*

189 Prior to use, Ni-NTA resin (6 ml per 200 ml culture) is washed with fresh PBS, then spun at 2000g
190 for 10 min in a centrifuge. Once the centrifugation is complete, PBS is discarded, and resin is
191 resuspended with the supernatant from cells and inverted about two or three times. The resin is
192 then incubated with the supernatant for 2 hours on a shaker at RT.

193

194 Two clean polypropylene columns are loaded with the supernatant-resin mixture and then washed
195 with Wash Buffer four times. Columns are then eluted using the Elution Buffer. Which contains a
196 high concentration of imidazole Four fractions are collected from each column by incubating the
197 resin in the column with 3 ml of Elution Buffer for each fraction. Eluate is collected directly in a 50
198 ml falcon tube placed on ice. The total volume of eluate should be 24 ml from the two columns.
199 More columns can be used to speed up the purification time depending on the volume of the
200 culture.

201

202 Eluate is spun through 10 kDa Amicon Centrifugal Filter Units (for RBD) or 50 kDa Amicon
203 Centrifugal Filter Units (for full-length spike) at 4000g for 30 minutes (or longer if eluate takes
204 longer to pass through the membrane) at 4°C until only 200-300 ul remain in the unit. The

205 Centrifugal Filter Unit is then washed with PBS twice by centrifugation at 4000g for 30 minutes at
206 4°C (washing means filling up with PBS and centrifugation until the volume in the unit is down to
207 200-300ul again). Finally, the protein is collected from the Amicon centrifugal unit, concentration
208 is measured (e.g. using Bradford reagent or similar methods), and a denaturing SDS-page is run
209 to check integrity of the purified protein.

210
211 After the elution step, protein is always kept on ice. For storage longer than 24h it should be frozen
212 to -80°C to avoid degradation.

213

214 **Wash buffer (4L):**

215 NaH₂PO₄·H₂O 31.74 g
216 NaCl 70.16 g
217 Imidazole 5.44 g (final concentration is 20 mM)
218 Distilled water* 4L

219

220

221 **Elution buffer (4L):**

222 NaH₂PO₄·H₂O 31.74 g
223 NaCl 70.16 g
224 Imidazole 64.0 g (final concentration is 235 mM)
225 Distilled water* 4L

226

227 *Use Distilled water filtered using a 0.22um stericup vacuum filtration system.

228

229

230 **Part II: A two-step ELISA protocol for high throughput screening of human serum** 231 **samples for antibodies binding to the spike protein of SARS-CoV-2**

232

233 The purpose of this part of the protocol is to describe the procedure for measuring human antibody
234 responses to the recombinant receptor binding domain (RBD) of the spike protein or full-length
235 spike protein of SARS-CoV-2 and to ensure the reproducibility and consistency of the obtained
236 results.

237 We developed this as a two-step ELISA in which the first step (**A**) includes relatively high
238 throughput screening of samples in a single serum dilution against the RBD (which expresses
239 very well and therefore there is typically more protein available). This is followed by a second step
240 (**B**) in which positive samples from the first step undergo a confirmatory ELISA against the full
241 length spike protein (which is harder to purify, therefore there is usually less available). For the
242 second step a dilution curve is performed. Typically, if only one operator is available, screening
243 ELISAs can be run in the morning (760 samples/10 plates per run) and confirmatory ELISAs can
244 be run in the afternoon (140 samples/10 plates per run). Of note, we describe the assay here as
245 set up in our laboratory. We use a plate washer and a plate reader but no automated system. The
246 protocol can be adapted to an automated liquid handler as well. In addition, one of the difficulties
247 to set up the assay is the availability of appropriate negative and positive controls. Negative
248 controls are easier to come by and can be serum pools of serum taken before 2020. Positive
249 controls can be convalescent samples from COVID19 patients or monoclonal antibodies (mAbs)
250 like CR3022^{9,10}. If no human sera or mAbs are available, mouse mAbs, mouse sera against
251 SARS-CoV-2, order animal sera against SARS-CoVo2 or anti-his tag antibodies (the proteins are
252 his-tagged) can be used. However, in this case a different secondary antibody for the species
253 from which the primary antibody is derived is needed for the positive control. Also, we recommend

254 generating large batches of positive controls, which can be used for many runs. The positive
255 control should be selected to exceed an OD₄₉₀ of the negative control plus 3 standard deviations
256 of the negative controls up to, at least, a 1:150 dilution. ELISAs can be run with both serum and
257 plasma.

258

259 *Of note: RBD or full length spike might be used for both ELISA steps if only one antigen is*
260 *available. In addition, only step A (not recommended) or only step B might be performed if fewer*
261 *resources are available.*

262

263

● MATERIALS

264

- Recombinant RBD protein

265

- Recombinant full-length spike protein

266

- Flat-Bottom Immuno Nonsterile 96-Well Plates 4 HBX (Thermo Scientific #3855, or equivalent)

267

- Flat Bottom Cell Culture Plates (Corning #3599 or equivalent)

268

- Milk Powder (AmericanBio #AB10109-01000, or equivalent)

269

- PBS (1X) (Gibco #10010-023 or equivalent)

270

- Water For Injection (WFI) for Cell Culture (Gibco #A1287301 or equivalent)

271

- Tween 20 (Fisher Bioreagents #BP337-500, or equivalent)

272

- Phosphate Buffered Saline (10X) (Corning™ 46013CM or equivalent)

273

- Polypropylene sterile conical tubes

274

- 15 mL (Denville Scientific #C1018P or equivalent)

275

- 50 mL (Fisher Denville Scientific #C1060P or equivalent)

276

- Sterile, serological pipettes

277

- 5mL (Falcon #356543 or equivalent)

278

- 10mL (Falcon #357551 or equivalent)

279

- 25 mL (Falcon #357535 or equivalent)

280

- 50 mL (Falcon #356550 or equivalent)

281

- Micropipette tips

282

- 20 µL barrier tips (Denville Scientific #P1121 or equivalent)

283

- 200 µL barrier tips (Denville Scientific #P1122 or equivalent)

284

- 200 µL tips (USA Scientific #1111-1700 or equivalent)

285

- 1000 µL barrier tips (Denville Scientific #P1126 or equivalent)

286

- Sterile reservoirs (Fisher Scientific #07-200-127 or equivalent)

287

- Anti-Human IgG (Fab specific)-Peroxidase antibody produced in goat (Sigma #A0293)

288

- Hydrochloric Acid 3.0M (Fisher Scientific #S25856, or equivalent)

289

- SIGMAFAST™ OPD (Sigma-Aldrich #P9187 or equivalent)

290

- Kimberly-Clark Kimwipes (Kimberly-Clark Professional #34721 or equivalent)

291

- Pipet-Aid

292

- Micropipettes

293

- Class II biological safety cabinet

294

- Ultra-Low Freezer (-80°C)

295

- Refrigerator at 4°C (+/- 1°C)

296

- Multichannel pipette(s) capable of pipetting 50-250 µL

297

- 1.5 mL Eppendorf tubes (Denville #C2170 or equivalent)

298

- Timer

299

- Aquamax 2000 Plate Washer (Molecular Devices #AQUAMAX 2000 or equivalent)

300

- Biotek SynergyH1 Microplate Reader or equivalent

301

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304

● DEFINITIONS

- 305
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315
- RBD = Receptor Binding Domain
 - ELISA = Enzyme-Linked Immunosorbent Assay
 - PBS = Phosphate-Buffered Saline
 - PBS-T = Phosphate-Buffered Saline with 0.1% Tween 20
 - RT = Room Temperature (18-25°C)
 - HRP = Horseradish Peroxidase
 - HCl = Hydrochloric Acid
 - OPD = o-phenylenediamine dihydrochloride

316 ● **A - RBD Screening ELISA**

317
318 1. Coating ELISA plates (day 1)

- 319 ● Thaw the required number of vials of antigen (SARS-CoV-2 **RBD** protein) to coat 96-
320 well microtiter ELISA plates at a concentration of 2 µg/ml. Once thawed, mix by gently
321 vortexing vial before diluting in 1X PBS.
322 ● Prepare approximately 5 mL for each plate to be coated.
323 ● Coat plates with 50 µl of diluted protein per well using a multichannel pipette and a
324 reservoir. Lightly tap plates against surface to ensure protein is evenly coating the
325 bottom of every well.
326 ● Incubate at 4°C overnight. Plates can be stored at 4°C for up to 1 week.
327 ● Always keep a cover plate on top of coated plates during all steps of the protocol!

328
329 2. Heat inactivation of samples (day 1, this is a safety precaution)

- 330 ● Set the water bath to 56°C. Once temperature is reached, place the serum/plasma
331 samples in and start the timer for 1h immediately.
332 ● Remove samples when the timer goes off. Do not leave samples at 56°C for longer
333 than 1h. Store at 4°C overnight or until use.

334
335 3. Block ELISA plate (day 2)

- 336 ● Calculate to prepare at least 30 ml of blocking solution per plate.
337 ● Blocking solution consists of PBS-T + 3% milk powder (weight/volume).
338 ● Using an automated plate washer, wash coated ELISA plates 3x with PBS-T.
339 ● Add 200 µl blocking solution to all wells of the plates, starting the timer for 1h (do not
340 exceed 4h) after completing the first plate. Place plates in a 20°C (RT) incubator.
341 *Note: This step (and wherever a plate washer is needed below) can also be performed*
342 *by washing plates with a multichannel pipette by hand if no plate washer is available.*
343

344 4. Pre-diluting samples (day 2)

- 345 ● In a biological safety cabinet, set up sterile Eppendorf tubes to pre-dilute serum
346 samples 1:5.
347 ● Add 40 µl of sterile 1X PBS to all tubes.
348 ● Gently vortex serum sample to mix and add 10 µl to the Eppendorf tube, vortexing
349 once more. Do this for all remaining samples including the positive and negative
350 controls. *Volume not needed in this part A will be stored and used for part B.*
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352 5. Dilution plate set-up (day 2)

- 353 ● Calculate and prepare at least 30 ml of PBS-T + 1% milk powder (weight/volume).

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- Prepare 1 dilution plate (separate flat bottomed cell culture plate) per antigen coated plate prepared.
- Add 180 µl of PBS-T containing 1% milk to all wells of the dilution plate (including blank wells)
- Leaving Columns 1 and 12 as blanks, add 20 µl of sample (or control) into the designated well. This results in a final serum dilution of 1:50.
- Continue until all samples and controls have been added to designated wells. See reference plate layout below.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| A | Blank | (+) Ctrl. | (-) Ctrl. | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Sample 7 | Sample 8 | Blank |
| B | Blank | Sample 9 | Sample 10 | Sample 11 | Sample 12 | Sample 13 | ... | ... | ... | | | Blank |
| C | Blank | | | | | | | | | | | Blank |
| D | Blank | | | | | | | | | | | Blank |
| E | Blank | | | | | | | | | | | Blank |
| F | Blank | | | | | | | | | | | Blank |
| G | Blank | | | | | | | | | | | Blank |
| H | Blank | | ... | ... | ... | Sample 73 | Sample 74 | Sample 75 | Sample 76 | (+) Ctrl. | (-) Ctrl. | Blank |

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- Transfer serum dilution (day 2)
 - After blocking incubation, remove plates from the room temperature incubator and throw off the blocking solution. Tap the plates dry on a kimwipe.
 - Using a multichannel pipette, pipette up and down 4-6 times in the first row of dilution plate to mix.
 - Transfer 100 µl to the corresponding rows in the ELISA plate. Change tips and continue to transfer second row to the ELISA plate.
 - Start the timer for 2h as soon as all the rows have been transferred to the first ELISA plate. (Do not exceed 4h)
 - Place plates in a 20°C (RT) incubator.
- Secondary Antibody (day 2)
 - After 2h, wash the plates 3x with PBS-T using the automated plate washer.
 - Dilute anti-human IgG (Fab specific) HRP labeled secondary antibody 1:3000 in PBS-T containing 1% milk. Prepare at least 5 ml per plate.

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- Add 50 µl to all wells of the plate using a multichannel pipette. Be sure to avoid touching the tips of the pipette to the walls of the well to avoid carry over and high background signals.
 - Start the timer for 1h (stay in a range of 50min to 65min) as soon as the secondary antibody has been added to the first plate. Place plates in a 20°C (RT) incubator.
8. Plate development and reading (day 2)
- After 1h, wash plates 3x with PBS-T using an automated plate washer.
 - Prepare SigmaFast OPD solution and calculate amount needed. One set of tablets (1 gold + 1 silver tablet) dissolved in 20 ml WFI can be used for 2 plates.
 - Fully dissolve one gold tablet in 20 mL WFI. Do not add silver tablet to solution until ready to start adding to the plates (needs to be prepared fresh right before use).
 - Add 100 µl to all wells of the plate. Begin timer for 10 minutes as soon as OPD has been added to the first row on the first plate. Do not exceed 10 minutes of developing before stopping the reaction.
 - To stop the reaction after exactly 10 minutes, add 50 µl of 3M HCl to all wells.
 - Read ELISA plates in plate reader at an absorbance of 490 nm (immediately after adding HCl) and record data.
 - Samples that exceed certain OD₄₉₀ cutoff value (proposed cutoff: OD₄₉₀ = 0.15-0.2 or mean of negative controls plus 3 times the standard deviation of the negative controls) are assigned presumptive positive and will be tested in confirmatory ELISA using full-length spike protein.
 - OD₄₉₀ cutoff has to be experimentally determined and depends on assay background and noise.
- **B - Spike confirmatory ELISA**
1. Coating ELISA plates (day 1)
- Thaw the required number of vials of antigen (SARS-CoV-2 **Spike** protein) to coat 96-well microtiter ELISA plates at a concentration of 2 µg/ml. Once thawed, mix by gently vortexing vial before diluting in 1X PBS.
 - Prepare approximately 5 mL for each plate to be coated.
 - Coat plates with 50 µl of diluted protein per well using a multichannel pipette and a reservoir. Lightly tap plates against surface to ensure protein is evenly coating the bottom of every well.
 - Incubate at 4°C overnight. Plates can likely be stored in 4°C for up to 1 week but this needs to be validate locally to ascertain that it does not change the results.
2. Block ELISA plate (day 2)
- Calculate to prepare at least 30 ml of blocking solution per plate.
 - Blocking solution consists of PBS-T + 3% milk powder (weight/volume).
 - Using an automated plate washer, wash coated ELISA plates 3x with PBS-T.
 - Add 200 µl blocking solution to all wells of the plates, starting the timer for 1 h (do not exceed 4h) after completing the first plate. Place plates in a 20°C (RT) incubator.
3. Pre-diluting samples (day 2)
- Retrieve 1:5 pre-diluted samples from Part A to be tested and confirmed (samples that are above certain threshold in RBD screening ELISA based on a set OD₄₉₀ value – see end of **A**).

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4. Serial dilution (day 2)

- Calculate and prepare at least 20 ml of PBS-T + 1% milk powder (weight/volume) per plate.
- After blocking incubation, remove plates from the room temperature incubator and throw off the blocking solution. Tap the plates dry on a kimwipe.
- Using a multichannel pipette, add 120 µl of PBS-T containing 1% milk to all wells of the plate.
- Leaving Columns 1 and 12 as BLANKS, add an extra 51 µl only to Columns 2 and 7 (=sample wells).
- Add 9 µl of 1:5 pre-diluted sample (final dilution 1:100 on the plate) to the first well in Column 2 and continue to add samples to all 8 wells. In Column 7, add samples to wells 1 through 6. Transfer positive and negative control into wells 7 and 8, respectively. See reference plate layout below.
- With the multichannel pipette, pipette up and down 4-6 times in Column 2 to mix. Discard these tips. With new tips, transfer 60 µl (3-fold dilution) from Column 2 to Column 3 and pipette up and down once 4-6 times to mix. Repeat this until Column 6; discard 60 µl before Column 7.
- Taking fresh tips mix Column 7 by pipetting. Repeat the same process of transferring, mixing, and discarding tips from Columns 7-11. Once Column 11 is reached, discard 60 µl.
- Start timer for 2h (do not exceed 4h) once the first ELISA plate has been serially diluted.
- Place plates in a 20°C (RT) incubator.



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|---|-------|----------|--|--|--|--|-----------|--|--|--|--|-------|
| A | Blank | Sample 1 | | | | | Sample 9 | | | | | Blank |
| B | Blank | Sample 2 | | | | | Sample 10 | | | | | Blank |
| C | Blank | Sample 3 | | | | | Sample 11 | | | | | Blank |
| D | Blank | Sample 4 | | | | | Sample 12 | | | | | Blank |
| E | Blank | Sample 5 | | | | | Sample 13 | | | | | Blank |
| F | Blank | Sample 6 | | | | | Sample 14 | | | | | Blank |
| G | Blank | Sample 7 | | | | | (+) Ctrl. | | | | | Blank |
| H | Blank | Sample 8 | | | | | (-) Ctrl. | | | | | Blank |

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5. Secondary Antibody (day 2)
 - After 2h, wash the plates 3x with PBS-T using the automated plate washer.
 - Dilute anti-human IgG (Fab specific) HRP labeled secondary antibody 1:3000 in PBS-T containing 1% milk. Prepare at least 5 ml per plate.
 - Add 50 μ l to all wells of the plate using a multichannel pipette. Be sure to avoid touching the tips of the pipette to the walls of the well.
 - Start the timer for 1 h (50 – 65 min) as soon as the secondary antibody has been added to the first plate. Place plates in a 20°C (RT) incubator.

6. Plate development and reading (day 2)
 - After 1h, wash plates 3x with PBS-T using an automated plate washer.
 - Prepare SigmaFast OPD solution and calculate amount needed. One set of tablets (1 gold + 1 silver tablet) dissolved in 20 mL WFI can be used for 2 plates.
 - Fully dissolve one gold tablet in 20 mL WFI. Do not add silver tablet to solution until ready to start adding to the plates.
 - Add 100 μ l to all wells of the plate. Begin timer for 10 minutes as soon as OPD has been added to the first row of the first plate. Do not exceed 10 minutes of developing before stopping the reaction.
 - To stop the reaction after exactly 10 minutes, add 50 μ l of 3M HCl to all wells.
 - Read ELISA plates in plate reader at an absorbance of 490 nm (immediately after adding HCl) and record data.
 - True positive samples will have a signal higher than the negative control plus 3 standard deviations of the negative controls in at least two consecutive dilutions.

Acknowledgements

We thank Dr. Raffael Nachbagauer (Icahn School for Medicine at Mount Sinai) and Dr. Aubree Gordon (University of Michigan) for critical reading and constructive comments. Development of this protocol was partially supported by the NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) contract HHSN272201400008C.

Philanthropic donations in support of our work are much appreciated since the reagents are shared free of charge with the scientific community. Please contact Vanes Saric (vanesa.saric@mountsinai.org) for further information.

References

1. Zhu, N., *et al.* A Novel Coronavirus from Patients with Pneumonia in China, 2019. *N Engl J Med* **382**, 727-733 (2020).
2. Wu, F., *et al.* A new coronavirus associated with human respiratory disease in China. *Nature* (2020).
3. Corman, V.M., *et al.* Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR. *Euro Surveill* **25**(2020).
4. Chu, D.K.W., *et al.* Molecular Diagnosis of a Novel Coronavirus (2019-nCoV) Causing an Outbreak of Pneumonia. *Clin Chem* (2020).
5. Bao, L., *et al.* Reinfection could not occur in SARS-CoV-2 infected rhesus macaques. *bioRxiv*, 2020.2003.2013.990226 (2020).

- 509 6. Callow, K.A., Parry, H.F., Sergeant, M. & Tyrrell, D.A. The time course of the immune
510 response to experimental coronavirus infection of man. *Epidemiol Infect* **105**, 435-446
511 (1990).
- 512 7. Wrapp, D., *et al.* Cryo-EM structure of the 2019-nCoV spike in the prefusion conformation.
513 *Science* (2020).
- 514 8. Amanat, F., *et al.* A serological assay to detect SARS-CoV-2 seroconversion in humans.
515 *medRxiv*, 2020.2003.2017.20037713 (2020).
- 516 9. Tian, X., *et al.* Potent binding of 2019 novel coronavirus spike protein by a SARS
517 coronavirus-specific human monoclonal antibody. *Emerg Microbes Infect* **9**, 382-385
518 (2020).
- 519 10. ter Meulen, J., *et al.* Human monoclonal antibody combination against SARS coronavirus:
520 synergy and coverage of escape mutants. *PLoS Med* **3**, e237 (2006).
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EXHIBIT “31”

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1477 E. Shaw #170
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(559) 777-7117

August 13, 2020

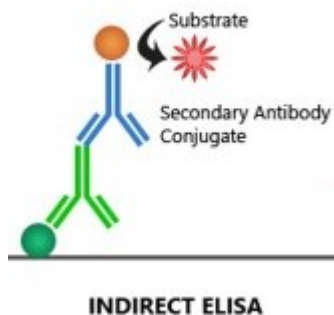
Dear Mr. Wood

Thank you for the opportunity to work together. I hope to have our results published, without mentioning the name of the school, when I get time to write it up.

The final tally is in Excel format. We assigned a number to each volunteer's sample, and, in keeping with HIPAA privacy rules, have disclosed detailed results only to the individuals in paper format.

The following is a summary of the work we performed:

We adapted an ELISA (Enzyme Linked Immunosorbent Assay) protocol published by Stadlbauer et al: (A serological assay to detect SARS-CoV-2 seroconversion in humans, *Nature Medicine*, 26 (1033-1136) (2020). This was used widely in Germany and New York. I am attaching the article for your convenience. The basic principle is illustrated in the following image(biosciencenotes.com):

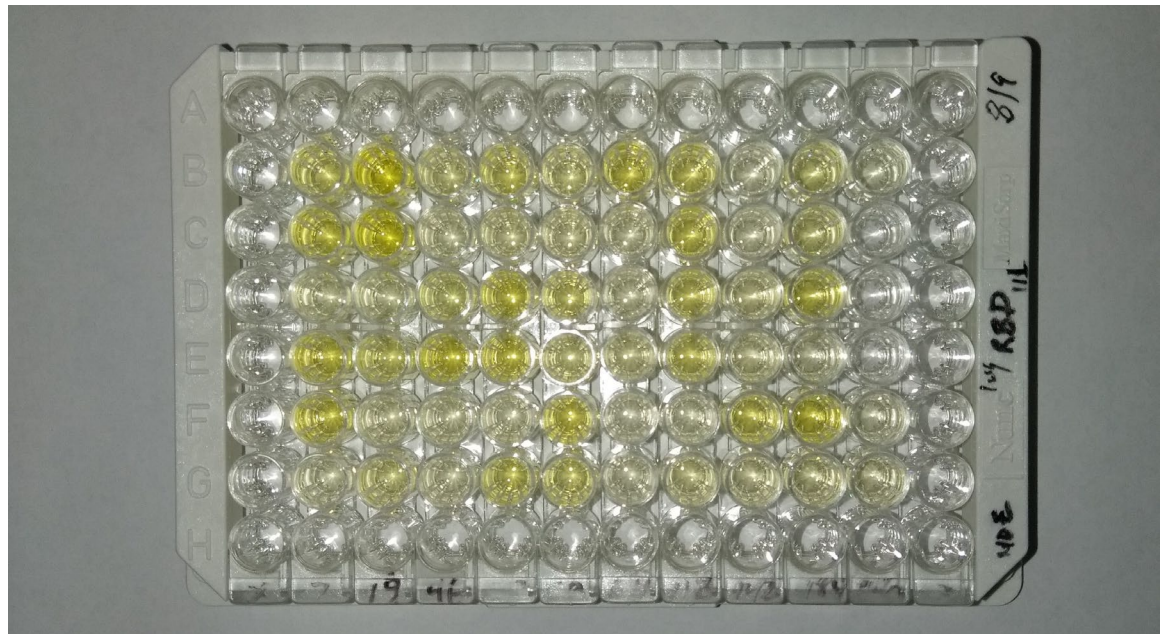


We made changes to the published protocol which optimized results. These included:

1. Purchase of SARS-Cov2 recombinant proteins (S1, RBD, N) from Raybiotech (Peachtree Corners, GA).
2. Purchase of antibody conjugate (HRP-Anti-human Fc) from Raybiotech (Peachtree Corners, GA)
3. Use of high binding microtiter plates from Nunc (Denmark).
4. Use of Hammarsten Casein (Bioworld, Dublin Ohio); 1.25- 1.5% mixed in 1 X PBS pH 7.2-7.4 as blocking agent.
5. We checked samples of patient plasma to assure they did not significantly react directly with the blocking agent.
6. Use of 1 ug/ml antigen coating in pH 9.6 bicarbonate buffer.
7. Striking off the microtiter plates after every wash by hand.
8. Performance of tests for S1 and RBD at 37 degrees.
9. No use of the edges of the plates at 37 degrees.
10. We performed most confirmation work at 1:160 or 1:200, so that results would be accurate and reproducible within one dilution (1:80- 1:320).

We used positive and negative samples from previously PCR positive or negative convalescent patients (Central California Blood Center) for evaluation of the basic procedure.

We strived to produce results which could be interpreted visually, but resorted to the spectrophotometer for resolution of difficult interpretations. For example, the following photo is a microtiter plate used for confirmation. Note that the edges are not used. Each well represents a volunteer sample at 1:160 dilution. The reaction has been stopped with acid after 6 minutes incubation with the substrate. All of the bright yellow wells are interpreted as positive. The weaker or absent color is interpreted as negative. We know what sample is in which well because we create a map of the plate.



simply not yet aware. Some people who were in the same household as PCR+ persons, and were ill do not necessarily have detectable antibody to the common antigens in use, yet some had minimal symptoms and recovered in a few days.

We tested each sample for antibody to S1 Subunit of the Spike protein, RBD antigen alone, and Nucleocapsid (N) protein. To call a final result positive, we required two positive results, or a single result so high that it simply could not be ignored.

The literature mentions use of what we consider artificial cut-offs and appears highly biased to detect very high antibody levels. A primary response tends to produce a lower antibody level. Extremely high levels are achieved only with an anamnestic response. Furthermore, as antibody levels drop off over time, an individual result which may have been positive 1 month after symptoms started, may drop to undetectable after 3 months. The antigens used are so specific, that we consider ANY result at a working titer of 1:160 or higher dilution as significant.

If you believe the health department is interested in science and facts, rather than something else, I would advise offering the volunteer samples to them immediately before significant deterioration can occur. They have been kept refrigerated, but will not survive indefinitely; we can freeze the plasma, but freezing and thawing is not beneficial to antibodies either. I would be willing to share a detailed protocol which would allow the state laboratory or any legitimate laboratory to reproduce our results.

As usual, if you have any questions, please call me on my cell phone at (559) 970-4803 as I generally do not function well with texts and emails, and do much better by telephone or face to face.

Best Regards,

Paul Atmajian, M.D.

EXHIBIT “32”

| VOLUNTEER | ALL NEG? | S1 | RBD | N-Protein | RESULT | NOTE |
|-----------|----------|------|-----|-----------|--------|------------------------|
| 1 | NO | POS | POS | POS | POS | |
| 2 | YES | NEG | NEG | NEG | NEG | |
| 3 | YES | NEG | NEG | NEG | NEG | |
| 4 | NO | POS | POS | NEG | POS | |
| 5 | YES | NEG | NEG | NEG | NEG | |
| 6 | NO | POS | POS | POS | POS | |
| 7 | NO | WEAK | POS | POS | POS | |
| 8 | NO | POS | POS | POS | POS | |
| 9 | NO | POS | NEG | NEG | POS | 1:320 S1 |
| 10 | NO | POS | POS | POS | POS | |
| 11 | NO | POS | POS | POS | POS | |
| 12 | YES | NEG | NEG | NEG | NEG | |
| 13 | NO | POS | POS | POS | POS | |
| 14 | NO | POS | POS | POS | POS | |
| 15 | NO | POS | POS | POS | POS | |
| 16 | NO | NEG | POS | POS | POS | |
| 17 | NO | NEG | POS | POS | POS | |
| 18 | NO | NEG | POS | POS | POS | |
| 19 | NO | POS | POS | POS | POS | |
| 20 | NO | POS | POS | POS | POS | |
| 21 | YES | NEG | NEG | NEG | NEG | |
| 22 | NO | POS | POS | POS | POS | |
| 23 | YES | NEG | NEG | NEG | NEG | |
| 24 | NO | POS | POS | POS | POS | |
| 25 | NO | NEG | POS | NEG | NEG | |
| 26 | NO | POS | NEG | POS | POS | |
| 27 | NO | NEG | NEG | POS | NEG | |
| 28 | NO | POS | NEG | POS | POS | |
| 29 | NO | POS | POS | POS | POS | |
| 30 | YES | NEG | NEG | NEG | NEG | |
| 31 | NO | POS | POS | POS | POS | |
| 32 | NO | NEG | NEG | POS+ | POS | High Anti-Nucleocapsid |
| 33 | NO | POS | POS | NEG | POS | |
| 34 | NO | POS | POS | POS | POS | |
| 35 | NO | POS | POS | NEG | POS | |
| 36 | NO | NEG | NEG | POS | NEG | |
| 37 | NO | POS | POS | POS | POS | |
| 38 | YES | NEG | NEG | NEG | NEG | |
| 39 | YES | NEG | NEG | NEG | NEG | |
| 40 | NO | NEG | NEG | POS | NEG | |
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| 46 | YES | NEG | NEG | NEG | NEG | |
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| 48 | NO | WEAK | POS | POS | POS | |
| 49 | NO | POS | POS | POS | POS | |
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| 51 | NO | NEG | NEG | POS | NEG | |
| 52 | NO | POS | POS | POS | POS | |
| 53 | NO | POS | NEG | POS | POS | |
| 54 | NO | POS | POS | POS | POS | |
| 55 | NO | POS | POS | POS | POS | |
| 56 | YES | NEG | NEG | NEG | NEG | |
| 57 | NO | POS | POS | POS | POS | |
| 58 | NO | NEG | POS | NEG | NEG | |
| 59 | NO | POS | NEG | NEG | NEG | |
| 60 | NO | POS | POS | POS | POS | |
| 61 | NO | POS | NEG | POS | POS | |
| 62 | NO | NEG | POS | POS | NEG | |
| 63 | NO | NEG | POS | POS | POS | |
| 64 | NO | POS | POS | POS | POS | |

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|-----|-----|------|-----|--------|-----|
| 65 | NO | POS | NEG | NEG | NEG |
| 66 | YES | NEG | NEG | NEG | NEG |
| 67 | NO | POS | NEG | POS | POS |
| 68 | NO | POS | NEG | NEG | POS |
| 69 | YES | NEG | NEG | NEG | NEG |
| 70 | NO | POS | POS | POS | POS |
| 71 | YES | NEG | NEG | NEG | NEG |
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| 73 | NO | NEG | NEG | POS | NEG |
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| 75 | YES | NEG | NEG | NEG | NEG |
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| 81 | NO | NEG | POS | POS | NEG |
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| 85 | NO | NEG | NEG | POS | NEG |
| 86 | NO | POS | POS | POS | POS |
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| 89 | NO | NEG | NEG | POS | NEG |
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| 91 | NO | POS | POS | POS | POS |
| 92 | NO | NEG | NEG | POS | NEG |
| 93 | YES | NEG | NEG | NEG | NEG |
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| 95 | NO | NEG | POS | NEG | NEG |
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| 98 | YES | NEG | NEG | NEG | NEG |
| 99 | NO | POS | NEG | POS+++ | POS |
| 100 | NO | POS | POS | POS | POS |
| 101 | NO | POS | POS | POS | POS |
| 102 | NO | POS | NEG | NEG | NEG |
| 103 | NO | POS | NEG | NEG | NEG |
| 104 | YES | NEG | NEG | NEG | NEG |
| 105 | NO | POS | POS | POS++ | POS |
| 106 | NO | POS | POS | POS | POS |
| 107 | YES | NEG | NEG | NEG | NEG |
| 108 | NO | POS | NEG | POS++ | POS |
| 109 | NO | POS | POS | POS | POS |
| 110 | NO | POS | POS | POS | POS |
| 111 | NO | POS | POS | POS | POS |
| 112 | NO | POS | POS | POS | POS |
| 113 | NO | NEG | POS | POS | POS |
| 114 | YES | NEG | NEG | NEG | NEG |
| 115 | NO | POS | POS | POS | POS |
| 116 | NO | WEAK | POS | POS | POS |
| 117 | YES | NEG | NEG | NEG | NEG |
| 118 | NO | NEG | POS | POS | POS |
| 119 | NO | NEG | POS | POS | POS |
| 120 | NO | NEG | POS | POS++ | POS |
| 121 | NO | NEG | POS | POS | POS |
| 122 | YES | NEG | NEG | NEG | NEG |
| 123 | NO | NEG | NEG | POS | NEG |
| 124 | YES | NEG | NEG | NEG | NEG |
| 125 | NO | POS | POS | POS | POS |
| 126 | YES | NEG | NEG | NEG | NEG |
| 127 | NO | POS | POS | POS | POS |
| 128 | YES | NEG | NEG | NEG | NEG |
| 129 | NO | NEG | NEG | POS | NEG |

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|-----|--|-----|------|------|-------|-----|
| 130 | | NO | POS | POS | POS+ | POS |
| 131 | | YES | NEG | NEG | NEG | NEG |
| 132 | | YES | NEG | NEG | NEG | NEG |
| 133 | | NO | NEG | POS | POS | POS |
| 134 | | NO | POS | NEG | POS++ | POS |
| 135 | | NO | POS | POS | POS | POS |
| 136 | | NO | POS | POS | POS | POS |
| 137 | | NO | POS | POS | POS+ | POS |
| 138 | | NO | NEG | NEG | POS | NEG |
| 139 | | NO | POS | POS | POS | POS |
| 140 | | NO | POS | POS | POS | POS |
| 141 | | NO | NEG | POS | POS | POS |
| 142 | | YES | NEG | NEG | NEG | NEG |
| 143 | | YES | NEG | NEG | NEG | NEG |
| 144 | | NO | NEG | NEG | POS | NEG |
| 145 | | YES | WEAK | NEG | NEG | NEG |
| 146 | | NO | POS | POS | POS | POS |
| 147 | | NO | POS | NEG | POS | POS |
| 148 | | NO | POS | POS | NEG | POS |
| 149 | | NO | POS | POS | NEG | POS |
| 150 | | NO | POS | POS | POS | POS |
| 151 | | YES | NEG | NEG | NEG | NEG |
| 152 | | YES | NEG | NEG | NEG | NEG |
| 153 | | NO | POS | POS | NEG | POS |
| 154 | | YES | NEG | NEG | NEG | NEG |
| 155 | | NO | POS | NEG | NEG | NEG |
| 156 | | NO | POS | POS | NEG | POS |
| 157 | | NO | POS | POS | NEG | POS |
| 158 | | YES | NEG | NEG | NEG | NEG |
| 159 | | NO | NEG | POS | POS | POS |
| 160 | | NO | NEG | WEAK | POS | NEG |
| 161 | | NO | NEG | POS | NEG | NEG |
| 162 | | NO | WEAK | POS | NEG | NEG |
| 163 | | YES | NEG | NEG | NEG | NEG |
| 164 | | NO | NEG | NEG | POS | NEG |
| 165 | | NO | WEAK | POS | NEG | NEG |
| 166 | | NO | POS | POS | POS++ | POS |
| 167 | | NO | POS | NEG | POS | POS |
| 168 | | NO | POS | NEG | POS | POS |
| 169 | | NO | NEG | POS | POS | POS |
| 170 | | NO | NEG | NEG | POS | NEG |
| 171 | | NO | NEG | NEG | POS | NEG |
| 172 | | NO | POS | POS | POS | POS |
| 173 | | NO | POS | NEG | POS | POS |
| 174 | | NO | POS | NEG | POS | POS |
| 175 | | NO | POS | POS | POS | POS |
| 176 | | NO | POS | NEG | POS | POS |
| 177 | | NO | NEG | NEG | POS | NEG |
| 178 | | NO | POS | POS | POS | POS |
| 179 | | NO | POS | POS | POS | POS |
| 180 | | YES | NEG | NEG | NEG | NEG |
| 181 | | NO | NEG | NEG | POS | NEG |
| 182 | | NO | POS | POS | POS | POS |
| 183 | | NO | POS | POS | POS | POS |
| 184 | | NO | WEAK | POS | POS | POS |
| 185 | | NO | WEAK | POS | NEG | NEG |
| 186 | | NO | POS | POS | POS | POS |
| 187 | | YES | WEAK | NEG | NEG | NEG |
| 188 | | NO | POS | POS | POS | POS |
| 189 | | NO | NEG | NEG | POS | NEG |
| 190 | | YES | NEG | NEG | NEG | NEG |
| 191 | | NO | WEAK | POS | POS | POS |
| 192 | | NO | NEG | POS | NEG | NEG |
| 193 | | YES | NEG | NEG | NEG | NEG |

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|-----|--|-----|------|-----|-----|-----|
| 194 | | NO | POS | POS | POS | POS |
| 195 | | NO | POS | POS | POS | POS |
| 196 | | NO | POS | POS | NEG | POS |
| 197 | | NO | WEAK | NEG | POS | NEG |
| 198 | | YES | NEG | NEG | NEG | NEG |

| | | PERCENT |
|--------------------------------------|-----|---------|
| TOTAL OF ALL SAMPLES TESTED | 198 | 100% |
| TOTAL SAMPLES TESTING ALL NEGATIVE: | 40 | 20% |
| TOTAL SAMPLES REPORTED POSITIVE: | 116 | 59% |
| NUMBER WITH ANTIBODY TO ONE ANTIGEN: | 44 | 23% |

A FINAL RESULT WAS CALLED POSITIVE IF PATIENT HAD DETECTABLE ANTIBODY TO TWO ANTIGENS, OR A VERY HIGH RESULT TO ONE ANTIGEN.

A FINAL RESULT WAS CALLED NEGATIVE IF ANTIBODY TO ONLY ONE ANTIGEN WAS DETECTED, OR IF NO ANTIBODIES WERE DETECTED.

EXHIBIT “33”

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6

7 Attorneys for **Defendants Immanuel Schools**
and Ryan Wood
8

9
10 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
11 **FOR THE COUNTY OF FRESNO**

12 COUNTY OF FRESNO through JEAN M,
13 ROUSSEAU, in his official capacity as
Emergency Services Director and County
14 Administrative Officer

15 Plaintiff,

16 v.

17 IMMANUEL SCHOOLS., a California non-
profit corporation; RYAN WOOD, Chief
18 Executive Officer of Immanuel Schools and
DOES 1 through 50, inclusive,

19 Defendants.
20

Case No.: 20CECG02447

**DECLARATION OF RYAN WOOD IN
SUPPORT OF OPPOSITION TO
TEMPORARY RESTRAINING ORDER**

Ex Parte

Date: August 25, 2020

Time: 3:29 p.m.

Dept. 501

21 I, RYAN WOOD, declare as follows:

22 1. I am over the age of eighteen years and I am the Superintendent of Petitioner
23 Immanuel Schools (“Immanuel”). I make this declaration based on my own personal knowledge
24 and if called to testify as a witness I could and would testify competently thereto.

25 2. I make this declaration in support of the Opposition to the Temporary Restraining
26 Order.

27 3. I have a Bachelor of Arts in Communicative Disorders and a Master’s Degree in
28 Educational Leadership. I have worked at Immanuel for over 25 years as both a teacher and

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administrator. As the Superintendent of Immanuel I oversee all aspects of its operations, including, but not limited to, academics, admissions, finances, athletics, and spiritual development of our students.

4. In March 2020, Immanuel complied with Governor Newsom’s orders to conduct school via distance learning. We anticipated the students would remain at home for 15 days and then return to complete the school year. The students did not return to school for in-person instruction to complete the 2019-2020 school year.

5. During the in-person closure, Immanuel created an excellent support system for its students. We received compliments from many parents regarding our efforts to avoid disrupting their student’s education. However, many of those same parents have informed us that they are unwilling to pay tuition if school is online only again.

6. Nearly all of Immanuel’s revenue is generated from tuition, fees, and fundraising. Immanuel has received State Title 2 funds in the past for professional development for our teachers, but declined any state funding for the 2020-2021 school year.

7. Prior to the pandemic, Immanuel was already in a tight financial situation due to a recent initiative to build a new elementary campus. If Immanuel is not permitted to hold in-person instruction, I anticipate we will have several families withdraw their students. In turn, I anticipate Immanuel will have to lay off teachers and staff because of the reduced tuition. By laying off employees it will affect the quality of education and experience for students and will make it more difficult to retain students in the future.

8. At the start of the summer, I worked closely with my administration team, which includes the Chief Administrative Officer, High School Principal, Junior High Principal, Elementary Principal, Athletic Director, and the Business Director, to develop a reopening plan for the 2020-2021 school year. We took the local, state, and federal guidelines and began creating a plan to safely reopen the school.

9. In addition to working with the administration, we worked with parents of our students to develop a reopening plan. We conducted a survey of our parents and documented their

1 responses in a spreadsheet that we used to help develop the reopening guidelines. Attached as
2 Exhibit “34” to this declaration is a true and accurate copy of the documented survey responses we
3 created. We also conducted a live Zoom call with the parents to address their questions and
4 concerns.

5 10. After a thorough evaluation of the parents’ concerns, the various county guidelines,
6 and Immanuel’s traditional operations, we created the reopening plan for 2020-2021. A true and
7 accurate copy of the reopening plan is attached hereto as Exhibit “35”. It took us weeks to develop
8 this plan and we sent it out to all parents for their review and consideration prior to committing their
9 student to attending Immanuel for the 2020-2021 school year.

10 11. The reopening plan calls for Immanuel to provide PPE for each classroom, office
11 space, and common areas. Immanuel hired a school nurse to help monitor the student population,
12 manage Covid-19 requirements, and take the lead on contact tracing.

13 12. In order for a student to enroll for in-person instruction at Immanuel for the 2020-
14 2021 school year, we require the parents of the student to review the reopening plan and sign off
15 that they are satisfied with the safety precautions Immanuel has developed.

16 13. I must commend my teachers for their efforts in providing a suitable online teaching
17 experience to our students during Spring 2020. However, teachers, parents, and students have all
18 echoed the same message. Online learning is not the same. This was repeated to me countless times
19 during the school year and the same message has followed me during the summer.

20 14. Our teachers choose to teach at Immanuel because they love the Lord, love their
21 students, and love teaching. Their love is best expressed in person.

22 15. For most of our students, it is clear that online education is not a substitute for in-
23 person instruction. A child’s education is not just about academics. An education involves aiding
24 a child’s physical, emotional, and spiritual development. Undoubtedly the “non-academic”
25 development for our students suffered significantly as they were cut off from their teachers and
26 classmates and were stuck at home in front of a screen. Moreover, we saw significant decreases in
27 with a lot of our students’ academic performance once we switched to distance learning.

28

1 16. Immanuel’s curriculum includes hands-on classes, such as shop class, culinary arts,
2 architecture, choir, drama, and athletics. It is impossible to adequately teach these classes to our
3 students via distance learning. There are many students that learn significantly better when using
4 their hands as opposed to just reading and memorizing facts, theories, formulas, or rules. These
5 students are suffering the most during this closure.

6 17. Immanuel is also a place where our students learn to get along with others, serve one
7 another, listen to authority figures, deal with disappointment, handle success, failure, and conflict.
8 The personal interaction that leads to this variety of situations does not exist in the online learning
9 environment. Immanuel’s students are missing a crucial aspect of their education when they are
10 stuck at home in front of a screen.

11 18. It is clear to me the prohibitions against providing in-person instruction is creating
12 serious problems for our children that will have negative long-term effects as they are unable to
13 fully develop while stuck at home in front of a screen.

14 19. It is my belief that Covid-19 spread through Immanuel prior to the March closures.
15 As detailed in Dr. Amtajian’s declaration, Immanuel students were tested for antibodies. In January
16 and February 2020, we had a significant surge in absences as compared to the same months in
17 previous years. For January 2020, 8 of our 13 grades had at least 40% of students record an absence
18 in the month, including 5 of the grades which had a 50% absent rate. In February 2020, 8 of our 13
19 grades had at least 50% of the students record an absence in the month. In total we had 1,129
20 recorded absences in January and February 2020, which is a significant uptick from the 831, 857,
21 and 819 we saw in January and February 2017, 2018, and 2019 despite similar enrollment numbers
22 across all years. Attached hereto as Exhibit “36” is a true and accurate copy of a spreadsheet I
23 created documenting absences for the 2015-2016 school year through the 2019-2020 season.

24 20. Immanuel Schools has contracts with the parents of each enrolled student to provide
25 a Christian based education. Immanuel Schools’ ability to complete its contractual obligations and
26 continue existing may be in jeopardy if Immanuel Schools is unable to provide in-person learning
27 to its students.

28

1 21. The Board of Immanuel Schools engaged in numerous conversations regarding the
2 disparate impact on students of not reopening for in-person instruction. I understand the risks of
3 COVID but believe, based on the California Department of Public Health and CDC guidelines, that
4 our Return to School plan properly provided accommodations for student and family safety. Upon
5 weighing our options, the Board decided, in conjunction with the independent antibodies studies
6 conducted on our school grounds, that the disparate impact on students learning far outweighed the
7 risks on opening with on-campus instruction.

8 22. I have discussed with parents who told me and school staff that home education
9 became burdensome, forcing families to choose between their child’s education and financial
10 stability. I believe this should be a choice for families to make, not a mandate forced upon families
11 through government officials.

12 23. I noticed a strain and tension on the student population as parents struggled to help
13 with Zoom conferences, homework, and technological issues.

14 24. Parents from Immanuel Schools report that their students are sad, disconnected,
15 depressed, and worried during the distance learning model. Since returning, those same parents
16 report that their children are smiling, happier, and more motivated. The social and relational aspect
17 is a much needed component of education and to eliminate that was a detriment to the students
18 emotional and spiritual development, not to mention the academic struggles created by being online.

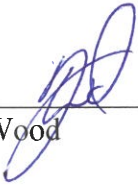
19 25. I believe the implementation of distance learning for the 2020-2021 school year may
20 place Immanuel Schools in a position where they may not recover financially and could not meet
21 the contractual obligations to provide education to the parents.

22 26. As we talked with families during the end of last school year and this summer, it
23 became apparent that the majority of our families did not want to engage in distance learning for the
24 2020-21 school year. I understood the importance of providing an on-campus education for our
25 families because it was unlikely that a lot of our families would be willing to pay tuition for an
26 online education when they could get that for free. Immanuel Schools projects a loss of 10% of our
27 student population if we started the year with online education only and would need to offer a 20%
28 reduction in tuition costs for those who remained.⁵ This would immediately institute the laying off

1 of a minimum of 15-20 employees to try and offset the loss of revenue from tuition. This would
2 have long term effects on our ability to offer an excellent education when we had students return to
3 on-campus education because there would be no guarantees that these employees would be available
4 for rehire. It would take weeks to replace them and then train them for the jobs that were vacated. It
5 also would be a financial loss of 1.4 million dollars of a 7.4 million dollar budget, which is a 19%
6 reduction. This would put Immanuel Schools in a financial position that may make it extremely hard
7 to continue to offer the level of education that people are willing to pay tuition and could eventually
8 cause us to close our doors.

9 27. As of August 24, 2020, no students, staff, or teachers at Immanuel Schools have
10 contracted COVID-19.

11 I declare under penalty of perjury under the laws of the State of California that the foregoing
12 is true and accurate. Dated August 24, 2020 at Reedley, California.

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15 _____
16 Ryan Wood

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EXHIBIT “34”

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|---|---|---|--|--|
| <p>Facial masks are currently mandated for all students in the state of California. If that mandate is not lifted, will this affect your decision to send your child to school?</p> | <p>If you are not comfortable with your child wearing a mask all day, please explain why.</p> | <p>Chapel is an essential part of the Immanuel experience. Are you concerned about your child's participation in Chapel services?</p> | <p>If you are not comfortable with your child participating in Chapel, please explain why.</p> | <p>We are currently planning on taking student and visitor temperatures as they get on a bus or arrive on campus each morning. How comfortable are you with this practice?</p> |
| <p>No</p> | <p>My child has asthma and can be difficult to wear mask and breathing can be a possible issue but would hope that my can get by with a mask on.</p> | <p>as long as there is social distancing</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |
| <p>Unsure</p> | <p>I don't believe it is healthy for a number of educated reasons why. I feel like the psychological emotional effects will not be known until Much later (mental health issue, lack of contact, depression, separation) and we believe physical health comes with a number of things including exposure to bacteria/virus/infections and building antibodies.</p> | <p>Can some social distances be in place?</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |
| <p>Yes</p> | <p>I am not comfortable with my child wearing a mask all day. A mask doesn't take the place of good hygiene. I don't want my child feeling suffocated all day long. We do not feel that wearing a mask is good psychologically for our children.</p> | <p>Chapel is a necessity</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |
| <p>Would like in classroom or distance learning option until vaccines are available</p> | <p>I can't answer that question without knowing the steps IHS will be taking during chapel to enhance the safety of our children. It is also hard to answer that question two months before school starts because we don't know locally how the virus will be affecting Reedley, the County, etc., in 2 months</p> | <p>How will they social distance in chapel?</p> | <p>Neutral</p> | <p>Neutral</p> |
| <p>Yes</p> | <p>I believe chapel is an essential part of going to a Christian school. Yes, they should be involved in Chapel.</p> | <p>Would they be able to social distance?</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |
| <p>☐</p> | <p>My comfort level will depend on what steps IHS is taking to help prevent the spread of Covid-19, once I know what the plan is for IHS regarding enhanced safety measures, etc. I could then answer that question more confidently. A lot of how comfortable (or not comfortable) I will feel in a couple months will depend on how the City of Reedley, Fresno County, the State, etc., are dealing with the Covid numbers in August. So, it depends on IHS's plan/process and the current state of virus when school resumes.</p> | <p>How will they social distance in chapel?</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |
| <p>No</p> | <p>I hope it continues while following state guidelines (if state required, then: outdoors, or smaller groups, or distancing, etc.). If not possible, then online again?</p> | <p>I would not feel comfortable with Chapel happening if it goes against state guidelines.</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |
| <p>Yes I would homeschool until the state says it's not mandatory, we love Immanuel and will send them back as soon as masks are not required.</p> | <p>According to CDC children under 12 don't have to wear them, info is out that says masks cause respiratory issues. We have not made them wear them up to this point. There is too much conflicting info out there.</p> | <p>I want Chapel to happen and am not worried about them getting sick, we go to church and big friends.</p> | <p>Very comfortable</p> | <p>Very comfortable</p> |

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| Yes | <p>it's extremely distracting & difficult to function normally (talk, sneeze, blow your nose, breathe, etc.). I feel it actually creates additional health issues & for those with even the slightest case of asthma (like our student/child) it significantly harms the ease of breathing. It creates anxiety and instills fear. With proper hand washing, general hygiene and sanitation stations, I feel masks are not necessary in the school setting.</p> <p>I don't think it is healthy or safe for a child to wear one all day.</p> | <p>I would be disappointed if chapel did not take place as that is a big part of why we chose to send our child to IHS. I'm not worried about social distances in chapel or in the classroom as I feel that children's immune systems need to be exposed to other germs to strengthen their own bodies.</p> | Somewhat uncomfortable |
| Unsure | | <p>If chapel is changed we can always do a chapel at home!</p> | Neutral |
| No | | <p>If social distancing is in place, we are ok with chapel.</p> | Very comfortable |
| Yes | <p>It would fatiguing, too much of a distraction, and may inadvertently create other health problems. There is also a high probability that elementary students would share masks with one another even if they were instructed not to do so.</p> | <p>It would depend on how Chapel was conducted.</p> | Neutral |
| No | | No | Very comfortable |
| Unsure | <p>Unknown long term affects of breathing in Her own carbon dioxide all day and weakening overall immune system from lack of shared good and bad germs.</p> | No | Very comfortable |
| Yes | <p>I am very uncomfortable with children wearing masks for the length of time that they are required to be at school! I am praying that Immanuel will not require masks at school! I will keep my children home if masks are required</p> | <p>We love chapel!! Please keep chapel! I also just want to say that the statistics for children with covid19 becoming seriously ill are SO LOW! It is more dangerous for them to get the flu! So I do not agree at All with mask wearing and chapel cancelling.</p> | Neutral |
| No | | No | Neutral |
| Unsure | | No | Very comfortable |
| No | <p>Distraction, difficult to breathe in</p> | No | Neutral |
| Unsure | <p>I believe it's not healthy for kids to wear masks all day.</p> | No | Very comfortable |

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|--|---|---|
| <p>Melanie has asthma and Madison has anxiety. Neither one of my girls would do well wearing a mask all day. I personally do not feel that the science is there to show that the masks are effective. Additionally, most people wearing a mask do not even wear them properly, so I feel that it just puts a lot of people in an uncomfortable position because they cannot breathe properly, then end up pulling the mask down to only cover their mouth. The mandate to wear a mask is a real deal breaker for me because I myself have trouble breathing with it on. I basically do my best to avoid any place that post signs saying it is required to enter an establishment. If I'm unable to get around it, I limit my time there as much as possible. I would not appreciate my children being made to wear a mask for the entire school day. On the other hand, if YOU feel more comfortable wearing a mask, I respect that decision, but don't make it a requirement for me to follow.</p> | <p>Can we just get back to life as we knew it before everyone was worried about a cold that you have a 98.5% chance of recovering from? When its your time to go, God is going to take you home. Wash your hands frequently and carry on.</p> | <p>No</p> <p>Somewhat uncomfortable</p> |
| <p>We don't agree with making our children wear masks all day.</p> <p>We don't agree with making our children wear masks all day.</p> | <p>Very comfortable</p> <p>Very comfortable</p> | <p>Very comfortable</p> <p>Very comfortable</p> |
| <p>I really don't want my child wearing a mask all day. We would continue with immanual and hope you are more lax on the mask requirement</p> | <p>Breathing problem. Sound is more muffled in a mask and so communication would be harder.</p> | <p>No</p> <p>Somewhat uncomfortable</p> |
| <p>We do not believe it is healthy to wear the mask all day.</p> | <p>We do not believe it is healthy to wear the mask all day.</p> | <p>No</p> <p>No</p> <p>No</p> <p>Very comfortable</p> <p>Somewhat uncomfortable</p> <p>Very comfortable</p> |
| <p>My child will not be wearing a mask at school. She is 5. She needs to be able to see facial expressions as they are an important part of being able to read body language. Smiles are a form of praise as well as affirmation. Children need to see facial expressions, it is a critical part of social and emotional development. My daughter gets very anxious and a mask would only add to her anxiety. Her teacher will need to be able to see her mouth moving during reading instruction. She is healthy. A mask can do more harm than good. She has not worn a mask thus far, however we have practices good healthy habits. I will continue to stress the importance of the frequent washing of hands with soap and water. I will keep her home when she is showing any signs or symptoms of being sick, I will continue to feed her foods that are a part of a healthy balanced diet, and I will continue to make sure she gets a good nights sleep. All of those will do more for her than a mask will.</p> | <p>Neutral</p> | <p>Neutral</p> |
| <p>Unsure</p> <p>Unsure</p> | <p>No</p> <p>No</p> | <p>Somewhat comfortable</p> <p>Very comfortable</p> |

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| Unsure | We feel like wearing a mask to school every day will be a distraction to their learning, as well as unhealthy for them because they're not able to breathe fresh air. we strongly believe that there is no benefit to wearing a mask to school every day. | No | Very comfortable |
| Unsure | | No | Neutral |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| Unsure | Medically unnecessary, hindrance to learning. distraction to learning | No | Very comfortable |
| No | | No | Neutral |
| Unsure | | No | Neutral |
| Yes | Unwise decision for good health. God is bigger than Covid-19 | No | Somewhat uncomfortable |
| Yes | It causes her to feel anxious. | No | Very comfortable |
| Unsure | | No | Very comfortable |
| Answer is Yes, we will not send our kids to school with masks | Because it's ridiculous. The CDC and the state have conflicting guidelines for Children 12 and under. | No | Neutral |
| No | I don't think kids will be able to leave them on all day without them being a distraction. | No | Very comfortable |
| No | | No | Very comfortable |
| Unsure | Two of our children have asthma, and wearing masks can make their breathing worse. The discomfort of wearing a mask would be distracting for all children in a learning environment. Further, the atmosphere created by everyone wearing a mask is oppressive, frightening, and damaging to personal relationships. We want our children back in live education, but we're firmly against wearing masks. | No | Very comfortable |
| — | | | |
| No | Not healthy | No | Very comfortable |
| Yes | | No | Very uncomfortable |
| No | | No | Very comfortable |
| No | We will support wearing of masks if it's required. However, we hope that students do not have to wear masks as they interfere with learning due to listening and being unable to read expressions of others. They also would be a problem for PE or recess as the masks reduce oxygen intake during strenuous activities. But we will support whatever decision is made. | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | Josiah cannot tolerate it. If he is allowed to wear a face shield it should be fine. | No | Very comfortable |
| No | | No | Neutral |
| No | | No | Very comfortable |

Of all the things needed at Immanuel Chapel is one of them.

I would like to see Jr High and HS meet separately so that students can be spaced apart with more ease.

| | | | |
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| Unsure | Personally I don't think it is necessary and practical for the kids and teachers to wear masks, especially for younger grades. I think it would hinder their learning, and excessive mask wearing comes with its own risks as well. | No | Somewhat comfortable |
| No | | No | Very comfortable |
| No | | No | Neutral |
| No | It does concern me that it does restrict breathing but I would be ok with my kids wearing masks for the majority of the day. I just hope there would be times when they could take them off. | No | Very comfortable |
| Unsure | Not healthy | No | Somewhat comfortable |
| Unsure | My child has anxiety at times and I believe a mask could exacerbate those instances where a panic attack comes on or potentially create an environment for panic attacks to occur more frequently. | No | Neutral |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very uncomfortable |
| No | | No | Very comfortable |
| Yes | I personally don't believe in the masks worth. Not good for them to be breathing their own Co2 all day | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | Respiratory issues. Bacterial infections, breathing higher than normal CO2 levels | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| Yes | they are not needed, they cause anxiety, stress and are not worn the way they are intended to be worn anyhow (without touching your face all day) | No | Very comfortable |
| No | | No | Very comfortable |
| No | My son will hate it but he will have to adapt | No | Neutral |
| No | N/A | No | Very comfortable |
| Unsure | I believe he needs to build immunity to germs and virus' and a mask prevents that | No | Neutral |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| No | | No | Very comfortable |
| Yes | I don't fear my child getting sick and don't think it's right to have kids wearing them. | No | Very comfortable |
| No | | No | Neutral |
| Yes | I won't be apart of the devils schemes I feel it lowers the body's immune system and decreases our ability to breath deeply. Wearing a mask can also lead to different types of health issues. Would it be possible for a child to simply wear a handkerchief instead of a mask, thus not being as restrictive in breathing? | No | Neutral |
| Unsure | | No | Somewhat comfortable |

N/A

| | | | |
|---|---|----|----------------------|
| Unsure | There is no proof that they prevent the spread of disease, so what's the point of wearing them. Also, especially with the excessive heat that we experience hear, they can be bad for one's health. | No | Neutral |
| Unsure | There is no proof that they prevent the spread of disease, so what's the point of wearing them. Also, especially with the excessive heat that we experience hear, they can be bad for one's health. | No | Neutral |
| No | | No | Very comfortable |
| As long as Immanuel is complying I will send my son to school. | | No | Very comfortable |
| No | | No | Very comfortable |
| Yes | Health of my child and I don't want them in that type of a sterile environment. I don't feel that it's best for their emotional or physical health! | No | Neutral |
| No | | No | Very comfortable |
| It is a real concern. We do not want Josiah going to school wearing a mask all day. | Masks create fear, and children are not at much risk for Covid-19. (Neither are most people in this area.) It is less healthy for them to breathe their own carbon dioxide all day long. Hand washing and training about how to sneeze/cough will go a long way toward health. | No | Neutral |
| Yes | Most adults cannot wear a mask properly let alone a child. Masks work in a controlled environment and can reduce the spread by only 15%. Now it's estimated that 20 million Americans have had COVID, mostly asymptomatic. Practice social distancing within reason, sanitize as necessary and stay home if sick. More children are dying of the flu. | No | Very comfortable |
| 14 | I do not think the kids will wear appropriately and the increase in touching their face will increase the chance of spread. | No | Very comfortable |
| No | | No | Very comfortable |
| Unsure | I can only speak from experience and education. The nature of my business for the last nineteen years involves OSHA certification / trainings for use of N95 masks. Based on trainings/ education and experiences I have received gives me the comfort level for my kids not to wear mask. | No | Neutral |
| No | I do not believe the masks effectively protect anyone from Covid, therefore making the masks unnecessary to wear. | No | Neutral |
| No | | No | Somewhat comfortable |
| No | | No | Neutral |
| No | | No | Neutral |
| No | | No | Somewhat comfortable |
| No | We believe the mask is actually worse for us than it benefits. We believe first that kids are not affected much by this virus. Also we feel the only way for this virus to truly be over is through herd immunity. We don't wear masks as often as possible! | No | Neutral |
| No | It's annoying. | No | Neutral |
| No | There is no real evidence that masks work. And my child has mild asthma so the mask makes it harder to breath and concentrate. | No | Neutral |
| No | | No | Somewhat comfortable |
| No | | No | Very comfortable |

| | | | | |
|-----|---|----|-----|----------------------|
| No | I would be fine with it. It may be a difficult sell to my kids. | No | N/a | Very comfortable |
| No | I don't believe that they are necessary...they are unsafe for kids to wear all day and they will be an unnecessary distraction in the classroom. | No | | Neutral |
| No | | No | | Neutral |
| No | | No | | Very comfortable |
| No | | No | | Very comfortable |
| No | | No | | Neutral |
| No | I don't particularly like the idea primarily because they are very uncomfortable to wear. My children complain whenever we wear them briefly now. I cannot even begin to imagine them wearing them all day. And if they are uncomfortable/bothering them I think it will interfere with their learning. In addition, because they are uncomfortable my children (and honestly most children) will undeniably begin to wear them the incorrect way which defeats the purpose and creates a false sense of safety. I think we are better off keeping class sizes small, spreading desks out, and teaching proper hygiene. | No | | Very comfortable |
| Yes | Our trust is in God. I have no issues with my children attending school and not wearing a mask as long as everyone takes their own basic precautions as needed (wash hands, hand sanitizer, dont go to school sick) Its a health issue to have their faces covered like that all day. It will eventually affect their breathing and with one of my children having asthma having his face covered all day just isnt an option for my family sorry | No | | Very comfortable |
| No | We believe it does more harm than good. | No | | Neutral |
| No | I think it's ridiculous. Very unnecessary. | No | | Very comfortable |
| No | | No | | Somewhat comfortable |
| No | | No | | Neutral |

| | | |
|--|-----------|-----------------------------|
| <p>I do not believe there is scientific evidence that masks stop the spread of disease. I believe mandatory mask guidelines are a government overreach of our human rights to make health decisions for ourselves and our children. These guidelines are allowing discrimination in our country towards those who chose not to wear them. I do not believe there is a law in place in the state of California that has gone through the legislative process that forces children or adults to wear a mask. A young child wearing a mask correctly all day is highly unlikely, and I believe it will cause more spread of sickness from children constantly touching their faces with dirty hands. It will be a huge burden on teachers trying to enforce this rule, taking away from teaching time. I believe that masks are dehumanizing as they take away all human facial expression, ability to read people faces & lips (for those with hearing issues) & the ability to communicate properly. Lastly I feel that mask are a health hazard, especially for young children, as they lower the flow of oxygen. For active children constantly breathing in the mask material all day long, I believe it can cause issues with the lungs especially in children who already have asthma and/or allergies. If there is a mandatory mask rule at Immanuel we will sadly be removing our 3 children from the school and will be greatly disappointed with this decision</p> | <p>No</p> | <p>Somewhat comfortable</p> |
| <p>Wearing masks for an extended period time is not healthy, in my opinion. It can lower oxygen levels which can cause a number of health issues. It's one thing to wear a mask for an hour or 2 but asking students to wear masks all day makes me uncomfortable. I also feel like the younger students, especially primary grades, would just mess with them and spread more germs instead of aiding in the prevention of spreading of them.</p> | <p>No</p> | <p>Very comfortable</p> |
| <p>I believe it is too hot to wear a face mask indoors as well as outdoors during the summer - even when in an air conditioned building. This also includes the bus. I have recently worn a mask where required and it is quite uncomfortable. I do NOT believe the children, teachers, administration and bus drivers should be wearing masks. I must emphasize bus drivers because they need to be able to wear glasses and see. It is difficult to see when glasses fog up when wearing a mask...</p> | <p>No</p> | <p>Very uncomfortable</p> |
| <p>I feel it is not necessary, will distract students from learning and it's not a law only a mandate to wear masks. I understand the school will have to do certain required guidelines from state. I pray by August these mandates are few!</p> | <p>No</p> | <p>Very comfortable</p> |
| <p>No</p> | <p>No</p> | <p>Neutral</p> |
| <p>Unsure</p> | <p>No</p> | <p>Very comfortable</p> |
| <p>No</p> | <p>No</p> | <p>Very comfortable</p> |
| <p>No</p> | <p>No</p> | <p>Very comfortable</p> |

| | | | |
|--------|--|----|------------------------|
| No | Masks are ridiculous! They cause breathing problems and are just difficult to wear all day. There is NO WAY students will wear them all day. They will be such a distraction! And, it is difficult to communicate with a mask on. Students and teachers will really struggle if masks are required. | No | Very comfortable |
| No | I will still send my student, but I cannot guarantee you they will wear a mask properly all day. I guarantee that won't happen! | No | Neutral |
| No | I don't believe the masks are that effective ... also - my daughters glasses fog up ... if it is required she will do it | No | Very comfortable |
| No | Because it's ridiculous lol | No | Neutral |
| No | It is a ridiculous idea to make people wear masks all day. | No | Neutral |
| No | I don't want my children to be forced to wear a mask but we won't stop them from attending school. | No | Very comfortable |
| Unsure | I don't want my child to have to wear a mask all day. | No | Neutral |
| Yes | It is absolutely not necessary. we do not need to throw the society's problems on to our children, the CDC has said masks aren't preventative. so why make the kids uncomfortable all day. | No | Neutral |
| No | Asthma, sweat, buiding immune system | No | Very comfortable |
| No | I would prefer not, however if it is mandated we will happily participate. | No | Very comfortable |
| No | Not healthy for them to wear mask | No | Very comfortable |
| No | These with an autoimmune disorder may have a medical reason not to wear one. I think masks will be an added distraction in a classroom setting not to mention wearing one around campus and someone having to enforce this would be tough on everyone. | No | Somewhat uncomfortable |
| Yes | Want my kids seeing smiles, and breathing fresh air. | No | Very comfortable |
| Yes | I don't believe masks are healthy for our children. They restrict breathing and kids won't wear them correctly anyways. Even if children are healthy a mask can be detrimental to their health (in my opinion) along with the physiological trauma I think they will face by not being able to see facial expressions of their teachers and peers. | No | Somewhat uncomfortable |
| No | I would rather my kids don't wear masks due to the warnings on the box. | No | Neutral |
| Unsure | I do not believe it provides protection. | No | Very comfortable |

Chapel is an essential part of Immanuel and chapel should be part of school in the fall.

| | | | |
|--------|--|----|----------------------|
| Yes | We feel that it will cause added stress & anxiety that will hinder their learning. We also have concerns of health risk to wearing a mask all day in class. | No | Very uncomfortable |
| No | Research done it is unhealthy to wear for extended periods of time and traps germs and fungus. | No | Very comfortable |
| No | Masks are not comfortable in general. They get in the way of speaking, eating and breathing. | No | Neutral |
| No | | No | Neutral |
| Yes | Our son (Joshua Thomas) will be starting at Immanuel in the 7th grade. Our primary motive for sending him is: 1) Christian education; 2) Christian friends; 3) Extracurricular activities. It seems that wearing masks will hurt education (hard to understand teachers, etc. it will be harder to make new friends (especially for a new student), if masks are required, then I'm assuming most extracurricular activities won't be happening. We probably won't send him if masks are required. | No | Very comfortable |
| No | I am not comfortable because of all the evidence showing that masks are not helpful. If my child has a mask on all day, he will not be receiving normal levels of oxygen which is not good for many reasons. I also do not like the psychological affects of children seeing everyone in masks. | No | Very comfortable |
| Unsure | | No | Neutral |
| No | Will they have opportunities to take them off for a while during the day? Meal time, recess time? Outside break time maybe? | No | Very comfortable |
| No | Its harder to breathe | No | Very comfortable |
| No | I do not feel it is safe, helpful or clean for my children to wear a mask for extended periods of time. | No | Neutral |
| Unsure | | No | Neutral |
| Yes | I believe wearing a mask poses multiple problems for both teacher and student. Younger children will likely be distracted by the mask; constantly dealing with the issues due to mask will take away from the classroom learning environment. More importantly, the mental well-being of children should be considered. When students and teachers are required to wear a mask the learning environment can seem scary and intimidating for a variety of reasons. School should feel safe and bring comfort to students. I have a student entering kindergarten and I feel that masks would only inflate my child's nerves and apprehension about going to school for the first time. For these reasons I strongly feel that elementary aged children should not be required to wear a mask during their schooling experience. | No | Somewhat comfortable |
| Unsure | Inhibits breathing and doesn't do a darn thing to protect them. | No | Neutral |
| | My son is asthmatic and pediatrician says do not wear as much as possible | No | Very comfortable |

| | | | |
|--------|-----|--|----------------------|
| No | Yes | The large number of students in an enclosed room is concerning. Perhaps you might consider providing Chapel for grades 7-8 one day, and 9-12 another or Mon/We'd one group, Tues/Thurs another group. | Very comfortable |
| Unsure | Yes | The close proximity of students to each other, the number of students in the chapel and the singing- the possibility of droplets emissions. | Very comfortable |
| No | Yes | Not being 6 feet apart from each other is my concern | Very comfortable |
| No | Yes | The concerned has to do with the large crowd of participation - I am sure masks would be removed during the singing portion. Please give details on the steps being taken so I can feel comfortable on my children participation in the Chapel. | Very comfortable |
| Unsure | Yes | I don't want my children to have to wear a mask. I just feel like it would be a distraction. | Very comfortable |
| No | Yes | There's just too many kids in one confined spot. Gathering places are what is driving this virus. I'd actually prefer for school to stay online in the fall. | Very comfortable |
| Yes | Yes | Chapel is about worship and community. Will chapel be broken up by class grade? It will be difficult singing, and social distancing, the chances of germs spreading high. | Somewhat comfortable |
| Unsure | Yes | The amount of kids in the room isn't maintaining the 6 feet boundary | Very comfortable |
| Unsure | Yes | So many students in the same room. | Very comfortable |
| No | Yes | Social distancing , will they follow the same guidelines the state has for churches | Very comfortable |
| Unsure | Yes | I would not be comfortable with communion as served. I am also concerned that social distancing will not be observed among students. I think junior high and high school should have separate chapels for more space | Very comfortable |
| No | Yes | Studies have proven that time indoors with other people is one of the highest risk factors. Top that off with singing being linked to numerous super outbreaks of covid 19 cases, and that all spells disaster for all children attending the chapels. Immanuel should base their decisions on science and facts and not on feelings of parents. | Very comfortable |
| No | Yes | | |

| | | | | |
|--------|---|--------|--|----------------------|
| Unsure | Health Reasons | Yes | The proximity to others as well as cleanliness of the Chapel and Classrooms. Admin & teachers should be required to have temperature checks every day as well. (for the answer below) Temperature checks are not foolproof. | Very comfortable |
| No | | Yes | Is there enough room to social distance in chapel? Singing has been known to spread the virus. Will chapels be handled differently? | Very comfortable |
| No | | Yes | need 6ft social distance | Very comfortable |
| Unsure | | Yes | Too many students together in a room that is indoors | Very comfortable |
| Unsure | I think it will not only inhibit their ability to learn, it is uncomfortable and hot to be in all day. I'm concerned also that if it isn't required enough precautions might not be taken to protect the student. | Yes | Again there are guidelines that say too many people in one place puts you at a higher risk for the illness. | Very comfortable |
| Yes | | Yes | Precautions would be needed. Students and/or classes sealed with adequate distance, masks worn and guests kept to a minimum to reduce risk to students and staff. Also, flag salute, lunch and recesses should be restricted or distanced into each separate class or grade to limit exposure across campus. | Neutral |
| No | | Yes | Large groups need to be avoided, social distancing should be mandated at the campus even during class. | Very comfortable |
| No | I would prefer for all students to wear a face mask. | Yes | In an inside environment, people are more vulnerable to infection from airborne particles, because they exhale and inhale deeply to sing. Could chapel be moved outside? | Very comfortable |
| No | | Yes | Too many students in such close contact | Very comfortable |
| Yes | We were required to a Stay-at-home order and wear masks to prevent any spread of the diseases within a 6 foot radius. And the numbers are currently rising due to person(s) not complying with these standards. How will the school accommodate these? Will the children be able to wear the masks all day? How comfortable will it be for the children to do this? Depending on the decision of my child, she will be the determining factor. A part time schedule will be more acceptable than going to school full time until this can pass. | Unsure | I am uncertain how the children will be able to participate in chapel with a mask on. What procedure will the school apply to abide within the social distancing standards? | Somewhat comfortable |

EXHIBIT “35”



Return to School Plan

Face Masks / PPE

- Hand Sanitizers, Disinfecting wipes and PPE's (Masks/Gloves) available in all classrooms and indoor locations around campus.
- Masks and gloves optional

Staff/Nurse

- All staff will complete a self-certification form each morning which includes a temperature check
 - Nurse
 - 7:30am - 3:00pm M-F (students on campus)
 - All communication & data related to cv-19 (cv-19 point person)
 - Responder to student health, illness, injury issues
 - Maintain immunization records
 - Health Office - upstairs in old athletics office
 - Nurse's office
 - Quarantine room
 - Supplies/equipment storage

Classrooms/Academics

- All students must have temperature taken by staff before entering the campus.
- Assigned seating (1st-12); and no prolonged group work
 - Wear a mask for junior high and high school when necessary for prolonged group works; example science experiments/Culinary Arts
- Rows in classrooms that have traditional desks (1st-12th)
- Personal Space/ Physical Distancing: vast majority classrooms meet the six foot requirement, but when unable to meet the six feet, desks

will be spaced apart to the extent possible as determined by the size of the classroom. Frequent reminders throughout the day to wash hands and cough/sneeze into tissue.

- IES - assign Chromebooks and wiped/sanitized between use
- IES - no “pod/group” supply sharing. Students will have individual supplies.
- IES - no classroom visitors/volunteers (student TA/Tutor exception)
- IJHS/IHS - no classroom visitors or guest speakers
- PE clothes - no dress out for regular 6th - 8th grade PE Class; PE clothes changing for 6th - 8th grades sports athletes only. PE students will be outside as much as possible and work in pods of 10 or smaller. Any equipment used will be disinfected and sanitized daily.
- HS Weights class will dress out in PE clothes and use the locker room as per usual.
- Culinary Arts - wear masks and gloves

Chapel/Events

- K-12 Assigned seating (every other seat) and staggered by row (365 student capacity)
- K-12 Live Stream chapel service accommodation for a student whose parent isn't comfortable with the “audience” setting (gym)
- Chapel Speakers - temperature checks upon arrival & will complete a symptoms questionnaire
- No Visitors at the start of the year
- No Communion at the start of the year
- IES - class chapels held off until Spring (hopefully to allow visitors to attend by then)

Recess/Lunch

- IES is adding a 3rd lunch period
- IES will sit per classroom group - assigned table
- IJHS will limit number of students to 6 per table, 4 per booth (indoor)
- IHS will limit number of students to 6 per table, 4 per booth (indoor)
- IJHS/IHS will have outdoor seating at tables
- Kitchen staff to wear gloves & mask

- Individually packaged food
- Compliance with health code inspection requirements

Transportation

- Temperatures will be taken before students get on the bus by the bus driver. Parent's must remain at the bus stop in case a student is turned away for a temperature higher than 100.
- We will keep a log of students who had their temperature taken. The nurse will be notified of individuals that were turned away because of the 100 degree temperature.
- Masks will be available (student/parent choice), but will not be required.
- Number of students per seat:
 - 2 per (if not siblings)
 - 3 per (if siblings)
- Students will be assigned seating on the bus based on family units.

Facilities

- Disinfecting/sanitizing:
 - All classrooms/offices at the end of each day
 - Eating locations between lunch periods
 - Kitchen at the end of each day
 - Playground & Outdoor equipment at end of each day
 - All buses at the end of each day
 - Locker Rooms at the end of each day
 - All other locations at the end of each day
- Drinking Fountains - NO USE
- All walk-in gates will be locked during school hours.
- Visitors and/or Late Arriving Students:
 - Must have temperature checked at the gate (Riverview)
 - Must have temperature checked before entering the office

Weight room/Locker rooms

- Student-Athletes clean equipment in the weight room immediately following use which will be monitored by the teacher.

- No internal or external use of the weight room after the nightly custodial team is done until the next morning's class.
- Locker room - school use as needed for PE classes/sports practices, limit the amount of students using at one time.

Sports

- Season & practice compliance with CIF directives.
- Sporting events - use as per usual for home team; no locker rooms for visiting team.

Online Learning Options

- Students/Family can choose our online option if not comfortable with on campus learning.
- Online will be offered when a student is out ill or quarantined which will help them keep up with their education.

EXHIBIT “36”

| | | 15/16 | | | | 16/17 | | | | 17/18 | | | | 18/19 | | | | 19/20 | | | |
|-----------|------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|
| | | Absences | with Absences | enrolled | with absences | Absences | with Absences | enrolled | with absences | Absences | with Absences | enrolled | with absences | Absences | with Absences | enrolled | with absences | Absences | with Absences | enrolled | with absences |
| August | K | 3 | 2 | 24 | 8.3% | 7 | 2 | 30 | 6.7% | 9 | 7 | 31 | 22.6% | 6 | 6 | 34 | 17.6% | 10 | 8 | 35 | 22.9% |
| | 1st | 7 | 4 | 34 | 11.8% | 3 | 2 | 26 | 7.7% | 14 | 5 | 32 | 15.6% | 15 | 7 | 38 | 18.4% | 17 | 10 | 34 | 29.4% |
| | 2nd | 6 | 6 | 20 | 30.0% | 4 | 4 | 33 | 12.1% | 2 | 1 | 29 | 3.4% | 13 | 4 | 35 | 11.4% | 8 | 6 | 38 | 15.8% |
| | 3rd | 8 | 7 | 22 | 31.8% | 4 | 3 | 21 | 14.3% | 2 | 1 | 40 | 2.5% | 3 | 2 | 31 | 6.5% | 12 | 7 | 39 | 17.9% |
| | 4th | 13 | 7 | 26 | 26.9% | 2 | 2 | 27 | 7.4% | 6 | 3 | 22 | 13.6% | 5 | 4 | 41 | 9.8% | 17 | 13 | 36 | 36.1% |
| | 5th | 5 | 4 | 18 | 22.2% | 3 | 1 | 28 | 3.6% | 3 | 3 | 29 | 10.3% | 6 | 4 | 26 | 15.4% | 31 | 14 | 45 | 31.1% |
| | 6th | 5 | 3 | 40 | 7.5% | 6 | 5 | 27 | 18.5% | 1 | 1 | 40 | 2.5% | 10 | 7 | 34 | 20.6% | 5 | 5 | 29 | 17.2% |
| | 7th | 7 | 7 | 52 | 13.5% | 4 | 2 | 45 | 4.4% | 2 | 2 | 37 | 5.4% | 8 | 4 | 52 | 7.7% | 18 | 11 | 46 | 23.9% |
| | 8th | 14 | 9 | 45 | 20.0% | 1 | 1 | 54 | 1.9% | 9 | 7 | 49 | 14.3% | 11 | 7 | 35 | 20.0% | 34 | 20 | 57 | 35.1% |
| | 9th | 10 | 7 | 73 | 9.6% | 14 | 8 | 69 | 11.6% | 21 | 13 | 78 | 16.7% | 11 | 10 | 61 | 16.4% | 8 | 6 | 49 | 12.2% |
| | 10th | 18 | 13 | 67 | 19.4% | 9 | 8 | 79 | 10.1% | 10 | 7 | 61 | 11.5% | 13 | 9 | 71 | 12.7% | 19 | 11 | 61 | 18.0% |
| | 11th | 17 | 11 | 70 | 15.7% | 11 | 7 | 70 | 10.0% | 13 | 10 | 64 | 15.6% | 25 | 15 | 57 | 26.3% | 17 | 9 | 67 | 13.4% |
| 12th | 27 | 16 | 56 | 28.6% | 11 | 7 | 68 | 19.7% | 15 | 13 | 66 | 19.7% | 14 | 9 | 66 | 13.6% | 30 | 17 | 60 | 28.3% | |
| September | K | 19 | 10 | 24 | 41.7% | 20 | 13 | 30 | 43.3% | 17 | 13 | 31 | 41.9% | 26 | 11 | 34 | 32.4% | 32 | 16 | 35 | 45.7% |
| | 1st | 32 | 15 | 34 | 44.1% | 34 | 12 | 26 | 46.2% | 24 | 11 | 32 | 34.4% | 15 | 12 | 38 | 31.6% | 38 | 17 | 34 | 50.0% |
| | 2nd | 10 | 6 | 20 | 30.0% | 31 | 18 | 33 | 54.5% | 5 | 4 | 29 | 13.8% | 16 | 10 | 35 | 28.6% | 28 | 13 | 38 | 34.2% |
| | 3rd | 14 | 9 | 22 | 40.9% | 15 | 6 | 21 | 28.6% | 31 | 15 | 40 | 37.5% | 9 | 7 | 31 | 22.6% | 31 | 16 | 39 | 41.0% |
| | 4th | 13 | 9 | 26 | 34.6% | 13 | 8 | 27 | 29.6% | 12 | 10 | 22 | 45.5% | 19 | 11 | 41 | 26.8% | 21 | 12 | 36 | 33.3% |
| | 5th | 13 | 7 | 18 | 38.9% | 28 | 13 | 28 | 46.4% | 12 | 7 | 29 | 24.1% | 17 | 9 | 26 | 34.6% | 30 | 15 | 45 | 33.3% |
| | 6th | 28 | 12 | 40 | 30.0% | 15 | 9 | 27 | 33.3% | 8 | 3 | 40 | 7.5% | 16 | 9 | 34 | 26.5% | 18 | 12 | 29 | 41.4% |
| | 7th | 24 | 19 | 52 | 36.5% | 28 | 17 | 45 | 37.8% | 17 | 10 | 37 | 27.0% | 25 | 14 | 52 | 26.9% | 18 | 10 | 46 | 21.7% |
| | 8th | 41 | 27 | 45 | 60.0% | 24 | 16 | 54 | 29.6% | 22 | 16 | 49 | 32.7% | 17 | 10 | 35 | 28.6% | 19 | 14 | 57 | 24.6% |
| | 9th | 34 | 23 | 73 | 31.5% | 37 | 27 | 69 | 39.1% | 31 | 23 | 78 | 29.5% | 30 | 21 | 61 | 34.4% | 21 | 14 | 49 | 28.6% |
| | 10th | 37 | 21 | 67 | 31.3% | 35 | 29 | 79 | 36.7% | 34 | 28 | 61 | 45.9% | 29 | 20 | 71 | 28.2% | 19 | 13 | 61 | 21.3% |
| | 11th | 46 | 24 | 70 | 34.3% | 34 | 23 | 70 | 32.9% | 29 | 22 | 64 | 34.4% | 35 | 17 | 57 | 29.8% | 36 | 16 | 67 | 23.9% |
| 12th | 44 | 26 | 56 | 46.4% | 56 | 37 | 68 | 54.4% | 48 | 25 | 66 | 37.9% | 54 | 34 | 66 | 51.5% | 24 | 19 | 60 | 31.7% | |
| October | K | 25 | 16 | 24 | 66.7% | 27 | 14 | 30 | 46.7% | 25 | 16 | 31 | 51.6% | 34 | 16 | 34 | 47.1% | 31 | 13 | 35 | 37.1% |
| | 1st | 21 | 14 | 34 | 41.2% | 13 | 9 | 26 | 34.6% | 35 | 13 | 32 | 40.6% | 31 | 16 | 38 | 42.1% | 33 | 14 | 34 | 41.2% |
| | 2nd | 9 | 5 | 20 | 25.0% | 21 | 13 | 33 | 39.4% | 5 | 3 | 29 | 10.3% | 31 | 14 | 35 | 40.0% | 40 | 20 | 38 | 52.6% |
| | 3rd | 9 | 6 | 22 | 27.3% | 15 | 7 | 21 | 33.3% | 38 | 20 | 40 | 50.0% | 25 | 14 | 31 | 45.2% | 26 | 14 | 39 | 35.9% |
| | 4th | 13 | 11 | 26 | 42.3% | 20 | 13 | 27 | 48.1% | 12 | 7 | 22 | 31.8% | 40 | 15 | 41 | 36.6% | 37 | 15 | 36 | 41.7% |
| | 5th | 10 | 7 | 18 | 38.9% | 9 | 8 | 28 | 28.8% | 17 | 10 | 29 | 34.5% | 16 | 10 | 26 | 38.5% | 37 | 19 | 45 | 42.2% |
| | 6th | 21 | 10 | 40 | 25.0% | 12 | 7 | 27 | 25.9% | 25 | 14 | 40 | 35.0% | 16 | 10 | 34 | 29.4% | 31 | 15 | 29 | 51.7% |
| | 7th | 13 | 9 | 52 | 17.3% | 23 | 11 | 45 | 24.4% | 10 | 9 | 37 | 24.3% | 19 | 15 | 52 | 28.8% | 20 | 12 | 46 | 26.1% |
| | 8th | 32 | 22 | 45 | 48.9% | 37 | 18 | 54 | 33.3% | 18 | 11 | 49 | 22.4% | 17 | 10 | 35 | 28.6% | 60 | 28 | 57 | 49.1% |
| | 9th | 37 | 20 | 73 | 27.4% | 46 | 27 | 69 | 39.1% | 39 | 26 | 78 | 33.3% | 23 | 15 | 61 | 24.6% | 39 | 16 | 49 | 32.7% |
| | 10th | 40 | 20 | 67 | 29.9% | 31 | 23 | 79 | 29.1% | 58 | 30 | 61 | 49.2% | 56 | 23 | 71 | 32.4% | 44 | 25 | 61 | 41.0% |
| | 11th | 50 | 28 | 70 | 40.0% | 29 | 21 | 70 | 30.0% | 35 | 21 | 64 | 32.8% | 42 | 24 | 57 | 42.1% | 34 | 22 | 67 | 32.8% |
| 12th | 48 | 24 | 56 | 42.9% | 32 | 27 | 68 | 39.7% | 41 | 29 | 66 | 43.9% | 41 | 24 | 66 | 36.4% | 44 | 27 | 60 | 45.0% | |
| November | K | 42 | 19 | 24 | 79.2% | 32 | 13 | 30 | 43.3% | 31 | 15 | 31 | 48.4% | 33 | 13 | 34 | 38.2% | 34 | 17 | 35 | 48.6% |
| | 1st | 52 | 23 | 34 | 67.6% | 22 | 12 | 26 | 46.2% | 39 | 19 | 32 | 59.4% | 37 | 14 | 38 | 36.8% | 48 | 18 | 34 | 52.9% |
| | 2nd | 17 | 7 | 20 | 35.0% | 28 | 15 | 33 | 45.5% | 6 | 3 | 29 | 10.3% | 58 | 17 | 35 | 48.6% | 39 | 19 | 38 | 50.0% |
| | 3rd | 27 | 12 | 22 | 54.5% | 13 | 9 | 21 | 42.9% | 19 | 10 | 40 | 25.0% | 32 | 11 | 31 | 35.5% | 42 | 22 | 39 | 56.4% |
| | 4th | 13 | 9 | 26 | 34.6% | 31 | 11 | 27 | 40.7% | 31 | 16 | 22 | 72.7% | 46 | 17 | 41 | 41.5% | 34 | 16 | 36 | 44.4% |
| | 5th | 23 | 7 | 18 | 38.9% | 26 | 15 | 28 | 53.6% | 24 | 13 | 29 | 44.8% | 28 | 12 | 26 | 46.2% | 40 | 18 | 45 | 40.0% |
| | 6th | 13 | 15 | 40 | 37.5% | 23 | 12 | 27 | 44.4% | 35 | 17 | 40 | 42.5% | 34 | 14 | 34 | 41.2% | 20 | 7 | 29 | 24.1% |
| | 7th | 33 | 25 | 52 | 48.1% | 28 | 14 | 45 | 31.1% | 15 | 12 | 37 | 32.4% | 31 | 19 | 52 | 36.5% | 27 | 14 | 46 | 30.4% |
| | 8th | 28 | 17 | 45 | 37.8% | 33 | 19 | 54 | 35.2% | 19 | 15 | 49 | 30.6% | 36 | 16 | 35 | 45.7% | 35 | 19 | 57 | 33.3% |
| | 9th | 43 | 24 | 73 | 32.9% | 48 | 31 | 69 | 44.9% | 37 | 28 | 78 | 35.9% | 36 | 22 | 61 | 36.1% | 35 | 20 | 49 | 40.8% |
| | 10th | 50 | 27 | 67 | 40.3% | 47 | 31 | 79 | 39.2% | 43 | 23 | 61 | 37.7% | 40 | 25 | 71 | 35.2% | 18 | 15 | 61 | 24.6% |
| | 11th | 44 | 24 | 70 | 34.3% | 32 | 23 | 70 | 32.9% | 48 | 33 | 64 | 51.6% | 36 | 23 | 57 | 40.4% | 17 | 14 | 67 | 20.9% |
| 12th | 42 | 21 | 56 | 37.5% | 55 | 37 | 68 | 54.4% | 45 | 30 | 66 | 45.5% | 67 | 30 | 66 | 45.5% | 22 | 15 | 60 | 25.0% | |
| December | K | 16 | 7 | 24 | 29.2% | 21 | 13 | 30 | 43.3% | 28 | 13 | 31 | 41.9% | 35 | 20 | 34 | 58.8% | 28 | 15 | 35 | 42.9% |
| | 1st | 26 | 16 | 34 | 47.1% | 29 | 9 | 26 | 34.6% | 32 | 13 | 32 | 40.6% | 23 | 14 | 38 | 36.8% | 44 | 22 | 34 | 64.7% |
| | 2nd | 11 | 5 | 20 | 25.0% | 34 | 18 | 33 | 54.5% | 7 | 6 | 29 | 20.7% | 22 | 13 | 35 | 37.1% | 27 | 10 | 38 | 26.3% |
| | 3rd | 12 | 6 | 22 | 27.3% | 11 | 10 | 21 | 47.6% | 32 | 15 | 40 | 37.5% | 31 | 15 | 31 | 48.4% | 54 | 22 | 39 | 56.4% |
| | 4th | 21 | 6 | 26 | 23.1% | 14 | 10 | 27 | 37.0% | 19 | 7 | 22 | 31.8% | 31 | 17 | 41 | 41.5% | 35 | 18 | 36 | 50.0% |
| | 5th | 6 | 4 | 18 | 22.2% | 20 | 7 | 28 | 25.0% | 9 | 29 | 31 | 31.0% | 15 | 9 | 26 | 34.6% | 25 | 15 | 45 | 33.3% |
| | 6th | 18 | 13 | 40 | 32.5% | 11 | 7 | 27 | 25.9% | 22 | 13 | 40 | 32.5% | 26 | 14 | 34 | 41.2% | 11 | 5 | 29 | 17.2% |
| | 7th | 9 | 6 | 52 | 11.5% | 16 | 8 | 45 | 17.8% | 6 | 5 | 37 | 13.5% | 22 | 15 | 52 | 28.8% | 17 | 12 | 46 | 26.1% |
| | 8th | 9 | 8 | 45 | 17.8% | 16 | 12 | 54 | 22.2% | 8 | 8 | 49 | 16.3% | 17 | 11 | 35 | 31.4% | 29 | 16 | 57 | 28.1% |
| | 9th | 27 | 12 | 73 | 16.4% | 23 | 18 | 69 | 26.1% | 13 | 12 | 78 | 15.4% | 11 | 9 | 61 | 14.8% | 11 | 9 | 49 | 18.4% |
| | 10th | 14 | 11 | 67 | 16.4% | 21 | 14 | 79 | 17.7% | 32 | 29 | 61 | 47.5% | 15 | 13 | 71 | 18.3% | 12 | 11 | 61 | 18.0% |
| | 11th | 25 | 15 | 70 | 21.4% | 19 | 13 | 70 | 18.6% | 25 | 17 | 64 | 26.6% | 16 | 12 | 57 | 21.1% | 8 | 7 | 67 | 10.4% |
| 12th | 16 | 10 | 56 | 17.9% | 34 | 22 | 68 | 32.4% | 38 | 27 | 66 | 40.9% | 21 | 13 | 66 | 19.7% | 15 | 11 | 60 | 18.3% | |
| January | K | 52 | 21 | 24 | 87.5% | 23 | 11 | 30 | 36.7% | 37 | 12 | 31 | 38.7% | 39 | 16 | 34 | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|----------|------|----|----|----|-------|----|----|----|-------|----|----|----|-------|----|----|----|-------|----|----|----|-------|
| | 7th | 18 | 11 | 52 | 21.2% | 23 | 12 | 45 | 26.7% | 24 | 14 | 37 | 37.8% | 16 | 11 | 52 | 21.2% | 29 | 17 | 46 | 37.0% |
| | 8th | 24 | 13 | 45 | 28.9% | 20 | 12 | 54 | 22.2% | 19 | 12 | 49 | 24.5% | 11 | 8 | 35 | 22.9% | 44 | 23 | 57 | 40.4% |
| | 9th | 37 | 22 | 73 | 30.1% | 68 | 35 | 69 | 50.7% | 42 | 29 | 78 | 37.2% | 41 | 22 | 61 | 36.1% | 39 | 18 | 49 | 36.7% |
| | 10th | 43 | 26 | 67 | 38.8% | 48 | 29 | 79 | 36.7% | 40 | 24 | 61 | 39.3% | 44 | 23 | 71 | 32.4% | 48 | 26 | 61 | 42.6% |
| | 11th | 42 | 22 | 70 | 31.4% | 27 | 23 | 70 | 32.9% | 34 | 24 | 64 | 37.5% | 24 | 15 | 57 | 26.3% | 36 | 21 | 67 | 31.3% |
| | 12th | 62 | 25 | 56 | 44.6% | 43 | 21 | 68 | 30.9% | 61 | 36 | 66 | 54.5% | 29 | 21 | 66 | 31.8% | 42 | 23 | 60 | 38.3% |
| February | K | 48 | 20 | 24 | 83.3% | 32 | 16 | 30 | 53.3% | 28 | 17 | 31 | 54.8% | 24 | 14 | 34 | 41.2% | 43 | 18 | 35 | 51.4% |
| | 1st | 67 | 20 | 34 | 58.8% | 20 | 12 | 26 | 46.2% | 27 | 16 | 32 | 50.0% | 36 | 20 | 38 | 52.6% | 59 | 22 | 34 | 64.7% |
| | 2nd | 20 | 13 | 20 | 65.0% | 34 | 20 | 33 | 60.6% | 17 | 8 | 29 | 27.6% | 29 | 16 | 35 | 45.7% | 42 | 21 | 38 | 55.3% |
| | 3rd | 30 | 14 | 22 | 63.6% | 4 | 3 | 21 | 14.3% | 32 | 12 | 40 | 30.0% | 23 | 18 | 31 | 58.1% | 55 | 21 | 39 | 53.8% |
| | 4th | 19 | 11 | 26 | 42.3% | 16 | 11 | 27 | 40.7% | 16 | 9 | 22 | 40.9% | 39 | 18 | 41 | 43.9% | 57 | 21 | 36 | 58.3% |
| | 5th | 28 | 11 | 18 | 61.1% | 24 | 10 | 28 | 35.7% | 13 | 9 | 29 | 31.0% | 23 | 15 | 26 | 57.7% | 48 | 20 | 45 | 44.4% |
| | 6th | 38 | 19 | 40 | 47.5% | 28 | 11 | 27 | 40.7% | 24 | 12 | 40 | 30.0% | 18 | 12 | 34 | 35.3% | 36 | 15 | 29 | 51.7% |
| | 7th | 41 | 25 | 52 | 48.1% | 34 | 19 | 45 | 42.2% | 22 | 15 | 37 | 40.5% | 20 | 12 | 52 | 23.1% | 41 | 21 | 46 | 45.7% |
| | 8th | 58 | 33 | 45 | 73.3% | 32 | 23 | 54 | 42.6% | 31 | 21 | 49 | 42.9% | 27 | 16 | 35 | 45.7% | 58 | 29 | 57 | 50.9% |
| | 9th | 36 | 29 | 73 | 39.7% | 72 | 41 | 69 | 59.4% | 65 | 45 | 78 | 57.7% | 28 | 19 | 61 | 31.1% | 38 | 20 | 49 | 40.8% |
| | 10th | 63 | 34 | 67 | 50.7% | 66 | 41 | 79 | 51.9% | 39 | 29 | 61 | 47.5% | 37 | 26 | 71 | 36.6% | 54 | 30 | 61 | 49.2% |
| | 11th | 66 | 38 | 70 | 54.3% | 61 | 31 | 70 | 44.3% | 59 | 41 | 64 | 64.1% | 44 | 28 | 57 | 49.1% | 41 | 26 | 67 | 38.8% |
| | 12th | 84 | 39 | 56 | 69.6% | 54 | 34 | 68 | 50.0% | 71 | 44 | 66 | 66.7% | 66 | 35 | 66 | 53.0% | 56 | 31 | 60 | 51.7% |

| | | 15/16 | 16/17 | 15/16 to 16/17 | 17/18 | 16/17 to 17/18 | 18/19 | 17/18 to 18/19 | 19/20 | 18/19 to 19/20 |
|------------------|------|--------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|
| | | #of Absences | #of Absences | % +/- | #of Absences | % +/- | #of Absences | % +/- | #of Absences | % +/- |
| August | K | 3 | 7 | 133.3% | 9 | 28.6% | 6 | -33.3% | 10 | 66.7% |
| | 1st | 7 | 3 | -57.1% | 14 | 366.7% | 15 | 7.1% | 17 | 13.3% |
| | 2nd | 6 | 4 | -33.3% | 2 | -50.0% | 13 | 550.0% | 8 | -38.5% |
| | 3rd | 8 | 4 | -50.0% | 2 | -50.0% | 3 | 50.0% | 12 | 300.0% |
| | 4th | 13 | 2 | -84.6% | 6 | 200.0% | 5 | -16.7% | 17 | 240.0% |
| | 5th | 5 | 3 | -40.0% | 3 | 0.0% | 6 | 100.0% | 31 | 416.7% |
| | 6th | 5 | 6 | 20.0% | 1 | -83.3% | 10 | 900.0% | 5 | -50.0% |
| | 7th | 7 | 4 | -42.9% | 2 | -50.0% | 8 | 300.0% | 18 | 125.0% |
| | 8th | 14 | 1 | -92.9% | 9 | 800.0% | 11 | 22.2% | 34 | 209.1% |
| | 9th | 10 | 14 | 40.0% | 21 | 50.0% | 11 | -47.6% | 8 | -27.3% |
| | 10th | 18 | 9 | -50.0% | 10 | 11.1% | 13 | 30.0% | 19 | 46.2% |
| | 11th | 17 | 11 | -35.3% | 13 | 18.2% | 25 | 92.3% | 17 | -32.0% |
| September | 12th | 27 | 11 | -59.3% | 15 | 36.4% | 14 | -6.7% | 30 | 114.3% |
| | K | 19 | 20 | 5.3% | 17 | -15.0% | 26 | 52.9% | 32 | 23.1% |
| | 1st | 32 | 34 | 6.3% | 24 | -29.4% | 15 | -37.5% | 38 | 153.3% |
| | 2nd | 10 | 31 | 210.0% | 5 | -83.9% | 16 | 220.0% | 28 | 75.0% |
| | 3rd | 14 | 15 | 7.1% | 31 | 106.7% | 9 | -71.0% | 31 | 244.4% |
| | 4th | 13 | 13 | 0.0% | 12 | -7.7% | 19 | 58.3% | 21 | 10.5% |
| | 5th | 13 | 28 | 115.4% | 12 | -57.1% | 17 | 41.7% | 30 | 76.5% |
| | 6th | 28 | 15 | -46.4% | 8 | -46.7% | 16 | 100.0% | 18 | 12.5% |
| | 7th | 24 | 28 | 16.7% | 17 | -39.3% | 25 | 47.1% | 18 | -28.0% |
| | 8th | 41 | 24 | -41.5% | 22 | -8.3% | 17 | -22.7% | 19 | 11.8% |
| | 9th | 34 | 37 | 8.8% | 31 | -16.2% | 30 | -3.2% | 21 | -30.0% |
| | 10th | 37 | 35 | -5.4% | 34 | -2.9% | 29 | -14.7% | 19 | -34.5% |
| October | 11th | 46 | 34 | -26.1% | 29 | -14.7% | 35 | 20.7% | 36 | 2.9% |
| | 12th | 44 | 56 | 27.3% | 48 | -14.3% | 54 | 12.5% | 24 | -55.6% |
| | K | 25 | 27 | 8.0% | 25 | -7.4% | 34 | 36.0% | 31 | -8.8% |
| | 1st | 21 | 13 | -38.1% | 35 | 169.2% | 31 | -11.4% | 33 | 6.5% |
| | 2nd | 9 | 21 | 133.3% | 5 | -76.2% | 31 | 520.0% | 40 | 29.0% |
| | 3rd | 9 | 15 | 66.7% | 38 | 153.3% | 25 | -34.2% | 26 | 4.0% |
| | 4th | 13 | 20 | 53.8% | 12 | -40.0% | 40 | 233.3% | 37 | -7.5% |
| | 5th | 10 | 9 | -10.0% | 17 | 88.9% | 16 | -5.9% | 37 | 131.3% |
| 6th | 21 | 12 | -42.9% | 25 | 108.3% | 16 | -36.0% | 31 | 93.8% | |
| 7th | 13 | 23 | 76.9% | 10 | -56.5% | 19 | 90.0% | 20 | 5.3% | |
| 8th | 32 | 37 | 15.6% | 18 | -51.4% | 17 | -5.6% | 60 | 252.9% | |

| | | | | | | | | | | |
|-----------------|------|----|--------|--------|-------|--------|--------|--------|--------|--------|
| November | 9th | 37 | 46 | 24.3% | 39 | -15.2% | 23 | -41.0% | 39 | 69.6% |
| | 10th | 40 | 31 | -22.5% | 58 | 87.1% | 56 | -3.4% | 44 | -21.4% |
| | 11th | 50 | 29 | -42.0% | 35 | 20.7% | 42 | 20.0% | 34 | -19.0% |
| | 12th | 48 | 32 | -33.3% | 41 | 28.1% | 41 | 0.0% | 44 | 7.3% |
| | K | 42 | 32 | -23.8% | 31 | -3.1% | 33 | 6.5% | 34 | 3.0% |
| | 1st | 52 | 22 | -57.7% | 39 | 77.3% | 37 | -5.1% | 48 | 29.7% |
| | 2nd | 17 | 28 | 64.7% | 6 | -78.6% | 58 | 866.7% | 39 | -32.8% |
| | 3rd | 27 | 13 | -51.9% | 19 | 46.2% | 32 | 68.4% | 42 | 31.3% |
| | 4th | 13 | 31 | 138.5% | 31 | 0.0% | 46 | 48.4% | 34 | -26.1% |
| | 5th | 23 | 26 | 13.0% | 24 | -7.7% | 28 | 16.7% | 40 | 42.9% |
| | 6th | 13 | 23 | 76.9% | 35 | 52.2% | 34 | -2.9% | 20 | -41.2% |
| | 7th | 33 | 28 | -15.2% | 15 | -46.4% | 31 | 106.7% | 27 | -12.9% |
| | 8th | 28 | 33 | 17.9% | 19 | -42.4% | 36 | 89.5% | 35 | -2.8% |
| | 9th | 43 | 48 | 11.6% | 37 | -22.9% | 36 | -2.7% | 35 | -2.8% |
| December | 10th | 50 | 47 | -6.0% | 43 | -8.5% | 40 | -7.0% | 18 | -55.0% |
| | 11th | 44 | 32 | -27.3% | 48 | 50.0% | 36 | -25.0% | 17 | -52.8% |
| | 12th | 42 | 55 | 31.0% | 45 | -18.2% | 67 | 48.9% | 22 | -67.2% |
| | K | 16 | 21 | 31.3% | 28 | 33.3% | 35 | 25.0% | 28 | -20.0% |
| | 1st | 26 | 29 | 11.5% | 32 | 10.3% | 23 | -28.1% | 44 | 91.3% |
| | 2nd | 11 | 34 | 209.1% | 7 | -79.4% | 22 | 214.3% | 27 | 22.7% |
| | 3rd | 12 | 11 | -8.3% | 32 | 190.9% | 31 | -3.1% | 54 | 74.2% |
| | 4th | 21 | 14 | -33.3% | 19 | 35.7% | 31 | 63.2% | 35 | 12.9% |
| | 5th | 6 | 20 | 233.3% | 22 | 10.0% | 15 | -31.8% | 25 | 66.7% |
| | 6th | 18 | 11 | -38.9% | 22 | 100.0% | 26 | 18.2% | 11 | -57.7% |
| | 7th | 9 | 16 | 77.8% | 6 | -62.5% | 22 | 266.7% | 17 | -22.7% |
| | 8th | 9 | 16 | 77.8% | 8 | -50.0% | 17 | 112.5% | 29 | 70.6% |
| | 9th | 27 | 23 | -14.8% | 13 | -43.5% | 11 | -15.4% | 11 | 0.0% |
| | 10th | 14 | 21 | 50.0% | 32 | 52.4% | 15 | -53.1% | 12 | -20.0% |
| 11th | 25 | 19 | -24.0% | 25 | 31.6% | 16 | -36.0% | 8 | -50.0% | |
| 12th | 16 | 34 | 112.5% | 38 | 11.8% | 21 | -44.7% | 15 | -28.6% | |
| January | K | 52 | 23 | -55.8% | 37 | 60.9% | 39 | 5.4% | 40 | 2.6% |
| | 1st | 37 | 24 | -35.1% | 37 | 54.2% | 29 | -21.6% | 64 | 120.7% |
| | 2nd | 21 | 17 | -19.0% | 19 | 11.8% | 37 | 94.7% | 55 | 48.6% |
| | 3rd | 11 | 14 | 27.3% | 28 | 100.0% | 49 | 75.0% | 59 | 20.4% |
| | 4th | 31 | 14 | -54.8% | 17 | 21.4% | 38 | 123.5% | 28 | -26.3% |
| | 5th | 12 | 21 | 75.0% | 25 | 19.0% | 22 | -12.0% | 46 | 109.1% |
| | 6th | 26 | 12 | -53.8% | 30 | 150.0% | 26 | -13.3% | 11 | -57.7% |

| | | | | | | | | | | |
|-----------------|------|----|----|--------|----|--------|----|--------|----|--------|
| | 7th | 18 | 23 | 27.8% | 24 | 4.3% | 16 | -33.3% | 29 | 81.3% |
| | 8th | 24 | 20 | -16.7% | 19 | -5.0% | 11 | -42.1% | 44 | 300.0% |
| | 9th | 37 | 68 | 83.8% | 42 | -38.2% | 41 | -2.4% | 39 | -4.9% |
| | 10th | 43 | 48 | 11.6% | 40 | -16.7% | 44 | 10.0% | 48 | 9.1% |
| | 11th | 42 | 27 | -35.7% | 34 | 25.9% | 24 | -29.4% | 36 | 50.0% |
| | 12th | 62 | 43 | -30.6% | 61 | 41.9% | 29 | -52.5% | 42 | 44.8% |
| February | K | 48 | 32 | -33.3% | 28 | -12.5% | 24 | -14.3% | 43 | 79.2% |
| | 1st | 67 | 20 | -70.1% | 27 | 35.0% | 36 | 33.3% | 59 | 63.9% |
| | 2nd | 20 | 34 | 70.0% | 17 | -50.0% | 29 | 70.6% | 42 | 44.8% |
| | 3rd | 30 | 4 | -86.7% | 32 | 700.0% | 23 | -28.1% | 55 | 139.1% |
| | 4th | 19 | 16 | -15.8% | 16 | 0.0% | 39 | 143.8% | 57 | 46.2% |
| | 5th | 28 | 24 | -14.3% | 13 | -45.8% | 23 | 76.9% | 48 | 108.7% |
| | 6th | 38 | 28 | -26.3% | 24 | -14.3% | 18 | -25.0% | 36 | 100.0% |
| | 7th | 41 | 34 | -17.1% | 22 | -35.3% | 20 | -9.1% | 41 | 105.0% |
| | 8th | 58 | 32 | -44.8% | 31 | -3.1% | 27 | -12.9% | 58 | 114.8% |
| | 9th | 36 | 72 | 100.0% | 65 | -9.7% | 28 | -56.9% | 38 | 35.7% |
| | 10th | 63 | 66 | 4.8% | 39 | -40.9% | 37 | -5.1% | 54 | 45.9% |
| | 11th | 66 | 61 | -7.6% | 59 | -3.3% | 44 | -25.4% | 41 | -6.8% |
| | 12th | 84 | 54 | -35.7% | 71 | 31.5% | 66 | -7.0% | 56 | -15.2% |

EXHIBIT “37”

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6

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and Ryan Wood
8

9
10 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
11 **FOR THE COUNTY OF FRESNO**

12 COUNTY OF FRESNO through JEAN M,
13 ROUSSEAU, in his official capacity as
Emergency Services Director and County
14 Administrative Officer

15 Plaintiff,

16 v.

17 IMMANUEL SCHOOLS., a California non-
profit corporation; RYAN WOOD, Chief
18 Executive Officer of Immanuel Schools and
DOES 1 through 50, inclusive,

19 Defendants.
20

Case No.: 20CECG02447

**DECLARATION OF LINDA REIMER IN
SUPPORT OF OPPOSITION TO
TEMPORARY RESTRAINING ORDER**

Ex Parte

Date: August 25, 2020

Time: 3:29 p.m.

Dept. 501

21 I, LINDA REIMER, declare as follows:

22 1. I am over the age of eighteen years and I am the Director of Counseling for petitioner
23 Immanuel Schools (“Immanuel”). I make this declaration based on my own personal knowledge
24 and if called to testify as a witness I could and would testify competently thereto.

25 2. I make this declaration in support of the Opposition to the Temporary Restraining
26 Order.

27 3. I have a Bachelor of Arts in English, Master’s Degree in English Literature, Master’s
28 Degree in Education: Counseling and Student Services, and a Doctorate in Psychology (PsyD).

1 4. In March 2020, Immanuel complied with Governor Newsom’s orders to conduct
2 school via distance learning. The students did not return to school for in-person instruction to
3 complete the 2019-2020 school year.

4 5. During the in-person closure, Immanuel created an excellent support system for its
5 students. However, the distance learning was a substantial adjustment for the staff, the students,
6 and their parents. A diverse group of students and/or their parents reported to me that it was a
7 struggle to find the self-motivation to attend lessons or office hours via Zoom and/or complete their
8 assignments. In addition, I dealt with a substantially higher number of students battling feelings of
9 anxiety, depression, and anger as compared to when Immanuel offered traditional in-person
10 instruction.

11 6. I spoke with many parents who revealed their children were placed on medication
12 for anxiety and/or depression, due, at least in part, to the loss of structure offered by in-person
13 instruction and were receiving online counseling. I had other parents discuss their child’s new or
14 increased struggles with anger management due to being stuck at home and the stress associated
15 with distance learning. The consistent theme in the conversations was these students and parents
16 missed the traditional setting and the interaction with teachers and classmates.

17 7. There was also a significant decrease in academic achievement amongst a diverse
18 group of Immanuel’s students. The group of students that demonstrated the most substantial drop
19 in achievement were those students who tend to finish in the middle grade range during traditional
20 instruction (i.e. “C”, “C+”, “B-”, and “B” level students). Many of those students failed to perform
21 their work and Immanuel had to intervene and provide extreme options for the students to make up
22 work over the summer to avoid having to repeat courses. Immanuel also noticed several higher
23 performing students, who are working towards admittance to competitive colleges after graduation,
24 struggling during the transition to online instruction.

25 ///

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8. It is clear to me that the loss of in-person instruction has contributed substantially to the decrease in many of Immanuel's students' academic, emotional, and social well-being.

I declare under penalty of perjury under the laws of the State of California that foregoing is true and accurate.

Executed August 24, 2020 at Reedley, California

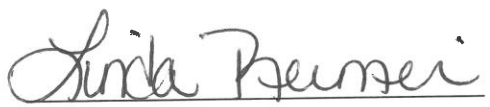

Linda Reimer

EXHIBIT “38”

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7 Attorneys for **Defendants Immanuel Schools**
and Ryan Wood
8

9
10 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
11 **FOR THE COUNTY OF FRESNO**

12 COUNTY OF FRESNO through JEAN M,
13 ROUSSEAU, in his official capacity as
Emergency Services Director and County
14 Administrative Officer

15 Plaintiff,

16 v.

17 IMMANUEL SCHOOLS., a California non-
profit corporation; RYAN WOOD, Chief
18 Executive Officer of Immanuel Schools and
DOES 1 through 50, inclusive,

19 Defendants.
20

Case No.: 20CECG02447

**DECLARATION OF PAMELA JAMES IN
SUPPORT OF OPPOSITION TO
TEMPORARY RESTRAINING ORDER**

Ex Parte

Date: August 25, 2020

Time: 3:29 p.m.

Dept. 501

21 I, PAMELA JAMES, the undersigned, declare as follows:

22 1. I am over the age of eighteen years and I am a third grade teacher at petitioner
23 Immanuel Schools (“Immanuel”) I make this declaration based on my own personal knowledge
24 and if called to testify as a witness I could and would testify competently thereto.

25 2. I make this declaration in support of the Opposition to the Temporary Restraining
26 Order.

27 3. I have a Bachelor of Science in Elementary Education and a Master’s Degree in
28 Education. I have been teaching for over 30 years.

1 4. In March 2020, Immanuel complied with Governor Newsom’s orders to conduct
2 school via distance learning. The students did not return to school for in-person instruction to
3 complete the 2019-2020 school year.

4 5. During the in-person closure, Immanuel set a standard schedule for how they wanted
5 the elementary school teachers to schedule our days to assist our students. We met with students
6 five days per week via the Zoom video conference application for approximately 1.5 hours to go
7 over the lessons for the day. I was then available for two scheduled hours to meet with students
8 and/or parents on an individual basis to go over work with them. Lastly, I also personally added a
9 reading time at the end of the day so I could read to the students.

10 6. On my end, distance learning brought on many challenges. The quality of the Zoom
11 lessons was negatively impacted by technology glitches, families with more than one child learning
12 in the household, and students’ inability to focus on a computer for hours at a time. In addition, I
13 could observe that students were easily distracted by siblings, pets, and/or toys.

14 7. I also experienced significant issues collecting students’ work. When conducting
15 traditional in-person instruction, handing out and receiving assignments is not a problem. However,
16 once we switched to distance learning it became an arduous process. Many families experienced
17 issues downloading or uploading assignments. I had parents texting me pictures of completed
18 assignments, emailing me assignments, or even mailing me weekly packets. It made tracking
19 assignments very difficult.

20 8. In addition, meeting with students with special academic needs was particularly
21 difficult. Many times, students would miss their assigned time to meet with me. These same
22 students had missing work which affected their grades.

23 9. The distance learning required parents to partner with teachers to ensure the students
24 were properly educated. Unfortunately, not all parents had the ability to give their undivided
25 attention to the student to help their learning. Many parents had to split their attention between their
26 own jobs and/or other children in the household. The distance learning was overwhelming for many
27 parents.

28

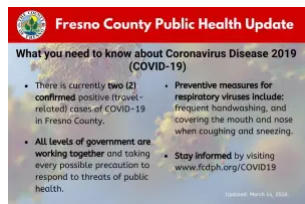
EXHIBIT "39"

Fresno County Officials Declare Local Public Health Emergency in Response to New COVID-19 Activity

ON MARCH 15, 2020 / BY FRESNOCOUNTYNEWSROOM



Today, March 15, 2020, the Fresno County Board of Supervisors and the Fresno County Department of Public Health (FCDPH) declared a local and public health emergency in response to the second confirmed case of coronavirus disease 2019 (COVID-19) and the potential for increased spread in the U.S. and Fresno County.



“Ensuring the health and safety of Fresno County residents is our top priority and that means making sure we have access to adequate resources and equipment to better protect our community should the threat of COVID-19 increase in Fresno County,” says Dr. Rais Vohra, Fresno County Interim Health Officer.

“Fresno County will continue to mobilize resources, continue with emergency planning, and coordinate with partners and agencies to ensure our community has the information and resources necessary to prepare and help protect against further COVID-19 spread in the community,” says Jean M. Rousseau, County Administrative Officer.

Dr. Vorha; CAO Rousseau; Director of Fresno County Dept. of Public Health, David Pomaville; and Director of Fresno County Dept. of Behavioral Health, Dawan Utecht; addressed local media alongside Fresno County Supervisors, Brian Pacheco (District 1), Steve Brandau (Dist. 2), Sal Quintero (Dist 3), Buddy Mendes (Dist 4), Nathan Magsig (Dist 5); Fresno County Sheriff, Margaret Mims; and Fresno Mayor, Lee Brand.

FCDPH is prepared to manage and investigate suspected and confirmed cases of COVID-19 within the County. FCDPH continues to work closely with the Centers for Disease Control and Prevention (CDC), the California Department of Public Health (CDPH), and local partners in order to provide Fresno County residents accurate information about how to reduce the spread of COVID-19 and other viruses such as Influenza.

Steps to take to prevent the spread of COVID-19 and other respiratory infections are:

- Stay home if you are sick
- Call your doctor before going into the healthcare facility or clinic
- If you do not have a doctor, call the FCDPH before going in
- Wash your hands with soap and water for at least 20 seconds after using the bathroom, before eating, and after blowing your nose, coughing, or sneezing
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash
- Get your flu vaccine to protect yourself and others. (Flu vaccine does not protect against COVID-19 but can prevent being infected with influenza and COVID-19 at the same time which can further weaken an individual's immune system).

Although individual risk for becoming infected with COVID-19 remains low for most residents in Fresno County, residents should still prepare for the possibility of further significant social distancing, should there become increased community spread.

Preparation measures should include:

- Having a reasonable supply of essentials at home (including water, food, hygiene products, medications, and pet food) in case the need to stay home arises
- Planning for the possibility of business disruptions, school closures, and modifications/cancellations of certain public events
- Practicing simple social distancing strategies that limit your exposure to others who may be sick (verbal greetings instead of handshakes and hugs, no sharing of utensils, cups, personal items and linens, staying 6 feet away from others in public settings).

Fresno County officials are asking businesses, schools, and community-based organizations to prepare plans that allow people to stay home if they are sick without the risk of being academically or financially penalized. Please make arrangements for sick employees or students to work or complete assignments from home.

FCDPH is requesting organizations to do the following to reduce the spread of COVID-19 and other viruses:

- Implement a cleaning and disinfecting schedule for frequently touched surfaces
- Ensure that your continuity of operations plans (COOP) are up to date, so their essential functions can continue
- Do not require a doctor's note for staff returning to work after being sick, when possible. This will reduce the strain on the healthcare system.

FCDPH will be taking measures to implement the following:

- Ensure that individuals who have tested positive for COVID-19 and their identified close contacts are being closely monitored and supported while they are in self-isolation
- Frequent updates and guidance for childcare facilities, schools, colleges/universities, employers, hotels, first responders, shelters, congregate living facilities and parents on how to prepare to reduce the spread of COVID-19
- Weekly teleconferences with elected officials, city managers, schools, healthcare facilities, first responders, and partners
- Constant communication and preparation with first responders and health care workers. Ensuring there is adequate supply of PPE.

For more information about COVID-19, visit these resources:

- Fresno County Department of Public Health: www.fcdph.org/covid19 (<http://www.fcdph.org/covid19>)
- Centers for Disease Control and Prevention: www.cdc.gov/coronavirus/2019-ncov/ (<https://www.cdc.gov/coronavirus/2019-ncov/>)

EXHIBIT "40"

ANNOUNCEMENTS

Fresno County Adopts Local Emergency Proclamation

Post Date: 03/17/2020 2:03 PM

Fresno County adopts Local Emergency proclamation, activates Emergency Operations Center in response to COVID-19 pandemic

FRESNO, CA, Tuesday, March 17, 2020 – The Fresno County Board of Supervisors has formally adopted a Local Emergency resolution and Fresno County has activated its Emergency Operations Center (EOC) to coordinate the County’s ongoing response to the evolving COVID-19 pandemic.

“Our experts with the County Department of Public Health have been working diligently to manage Fresno County’s ongoing response efforts and keep our communities safe,” says Fresno County Administrative Officer, Jean Rousseau. “As this pandemic continues to evolve, activation of the EOC is a necessary step to lend more personnel, resources and capacity for the County to effectively support our communities during this uncertain time.”

Fresno County also announced steps being taken to help minimize risks of potential exposure for employees and the public by minimizing staffing levels, encouraging remote work, providing alternative means for the public to access services remotely, postponing services, closing facilities as needed, and encouraging those who conduct in-person business with the County to utilize alternate means.

“We recognize the concerns shared by our entire community,” says Rousseau. “Many people in Fresno County rely on County services and it is our intent to provide options and minimize disruptions wherever possible. However, protecting public health and safety is always our top priority and we encourage residents to adhere to CDC and State guidance and take appropriate measures to prepare for additional impacts as the situation develops.”

FCDPH continues to investigate suspected cases of COVID-19 within the County and continues to work closely with the Centers for Disease Control and Prevention (CDC), the California Department of Public Health (CDPH), and local partners in order to provide Fresno County residents accurate information about current risk and how to help reduce the spread of COVID-19 and other viruses such as Influenza.

To date, Fresno County has confirmed two positive cases of travel-related COVID-19. While the risk to our region remains low, the County encourages the public to adhere to CDC and State recommendations regarding hygiene, travel, social distancing, public gatherings and otherwise to help prevent the further spread of this virus in our community and beyond.

For more information about COVID-19, including the local status, actions being taken, and guidance visit these resources:

- Fresno County Department of Public Health: www.fcdph.org/covid19
- Centers for Disease Control and Prevention: www.cdc.gov/covid19
- California Department of Public Health: www.cdph.ca.gov/covid19

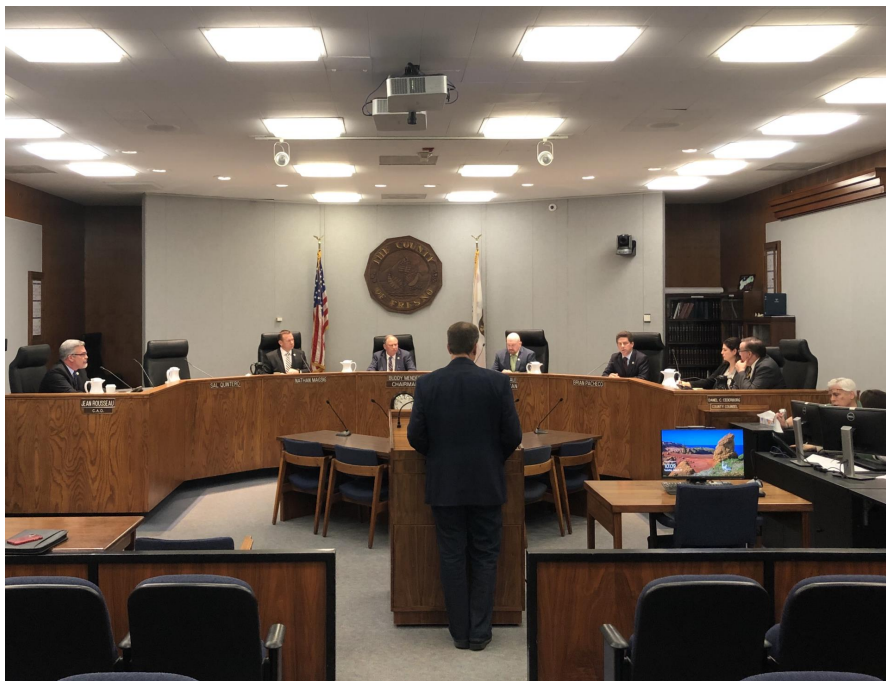


Photo – David Pomaville, Director of Fresno County Department of Public Health, addresses the Fresno County Board of Supervisors regarding the Local Emergency declaration and current efforts to respond in Fresno County.

[Return to full list >>](#)

EXHIBIT "41"



County of Fresno

DEPARTMENT OF PUBLIC HEALTH

Ordered Closure

HEALTH OFFICER ORDER FOR COUNTY OF FRESNO TO CLOSE ALL IMMANUEL SCHOOLS

Please read this Order carefully. Violations of or failure to comply with this Order is a crime punishable by fine, imprisonment, or both. Violators are also subject to civil enforcement actions including civil penalties of up to \$1,000 per violation per day, injunctive relief, and attorneys' fees and costs. (Health and Safety Code Section 120275; Penal Code Section 19; Government Code Sections 25132 and 8665; County Ordinance 2.44.100)

Under the authority of California Health and Safety Code Sections 101040, 101085, 120175, and 120275; Title 17 California Code of Regulations Section 2501; Article XI of the California Constitution; California Government Code Sections 8610, 8630, 8634, and 8665; and Fresno County Code Section 2.44.100, The Health Officer of the County of Fresno ("Health Officer") Orders:

1. All Immanuel Schools, headquartered at 1128 South Reed Avenue, Reedley, CA 93654, regardless of grade level taught or building location, shall close for in-person instruction until Fresno County has come off the State's Monitoring List for fourteen (14) consecutive days. School community members – including parents, teachers, staff and students – can track daily data on whether and why their county is on the Monitoring List at <https://covid19.ca.gov/roadmap-counties/#track-data>.
2. All Immanuel Schools, regardless of grade level taught, shall follow the State of California's [School and School Based Program Guidance](#) (PDF).
3. Any elementary school wishing to receive a State [waiver to open in-person instruction](#) (PDF) shall only be granted the waiver at the discretion of the Fresno County Health Officer.
4. Violation of this order will subject Immanuel Schools to civil enforcement actions including civil penalties of up to \$1,000 per violation per day, injunctive relief, and attorneys' fees and costs.
5. This Order is issued as a result of the worldwide pandemic of COVID-19 disease, also known as "novel coronavirus" which has infected over ten million individuals worldwide in over 200 countries and is implicated in over 700,000 worldwide deaths, including over 16,000 cases and 150 deaths in Fresno County. These numbers increase significantly every day.
6. This Order is issued based on evidence of increasing transmission of COVID-19 both within the County of Fresno and worldwide, scientific evidence regarding the most effective approach to slow transmission of communicable diseases generally and COVID-19 specifically as well as best practices as currently known and available to protect the public from the risk of spread or of exposure to COVID-19.

Promotion, preservation and protection of the community's health

1221 Fulton Street / P. O. Box 11867, Fresno, CA 93775
(559) 600-3200 • FAX (559) 600-7687

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7. This Order is intended to address the strain upon the health care system from the effects of the COVID-19 virus. Similarly, this Order is intended to reduce the likelihood of exposure to COVID-19, thereby slowing the spread of COVID-19 in communities worldwide.
8. This Order is issued in accordance with, and incorporates by reference, the: March 4, 2020 Proclamation of a State of Emergency issued by Governor Gavin Newsom; the March 13, 2020 Declaration of a National Emergency issued by President Donald Trump; the March 15, 2020 Declaration of Local Health Emergency based on an imminent and proximate threat to public health from the introduction of novel COVID-19 in Fresno County; the March 15, 2020 Declaration of Local Emergency; the March 17, 2020 Resolutions of the Board of Supervisors of the County of Fresno ratifying the Local Emergency and Local Health Emergency; the guidance issued on March 11, 2020 by the California Department of Public Health regarding large gatherings of 250 people or more; Governor Gavin Newsom's Executive order N-25-20 of March 12, 2020 preparing the State to commandeer hotels and other places or temporary residence, medical facilities, and other facilities that are suitable as places of temporary residence or medical facilities as necessary for quarantining, isolating, or treating individuals who test positive or COVID-19 or who have had a high-risk exposure and are thought to be in the incubation period; the guidance issued on March 15, 2020 by the centers for Disease Control and Prevention, the California Department of Public Health, and other public health officials through the United States and around the world recommending the cancellation of gatherings involving more than fifty (50) or more persons in a single space at the same time; Governor Newsom's Executive Order N-33-20 giving the state the ability to increase the health care capacity in clinics, mobile health care units and adult day health care facilities and allowing local governments more flexibility to utilize the skills of retired employees in order to meet the COVID-19 surge; Governor Newsom's Executive Order N-39-20 indented to expand the health care workforce and recruit health care professionals to address the COVID-19 surge; the California Public Health Officer's Order issued July 17, 2020; the California Department of Public Health's July 17, 2020 guidelines on reopening schools; and the California Department of Public Health's Industry Guidance for Schools and School Based Programs updated on August 3, 2020 . The Governor and the County Public Health Officer continue to issue COVID-19-related orders to mitigate the public health crisis.
9. This order is made in accordance with all applicable State and Federal laws, including but not limited to: Health and Safety Code Sections 101030, et seq.; Health and Safety Code Sections 120100, et. Seq.; and Title 17 of the California Code of Regulations Section 2501.
10. To the extent necessary, pursuant to Government Code Sections 26602 and 41601 and Health and Safety Code Section 101029, the Health Officer requests that the Sheriff and all Chiefs of Police in the County ensure compliance with and enforcement of this Order. Violators are also subject to civil enforcement actions including civil penalties of up to \$1,000 per violation per day, injunctive relief, and attorneys' fees and costs.
11. Copies of this Order shall promptly be (1) made available at the County of Fresno Department of Public Health office located at 1221 Fulton Mall, Fresno, CA 93721; and (2) provided to any member of the public requesting a copy of this Order.

Rais Vohra MD

(Signature of Health Officer or Deputy Health Officer)

August 13, 2020
(Date of Issuance of Order)

NOTICE OF RIGHTS

1. If you object to this order, you have a right to arrange for your own legal representative.
2. You have a right to also file for judicial relief to seek release from the order.
3. All requests to contact the County Health Officer will be through FCDPH at (559) 600-3332 during normal business hours. After hours, weekends, and holidays notify FCDPH On-Call staff at (559) 352-7067. If no response, contact County Sheriff Dispatch at (559) 600-3111.

Rais Vohra MD

(Signature of Health Officer or Deputy Health Officer)

August 13, 2020
(Date of Issuance of Order)

EXHIBIT "42"



State of California—Health and Human Services Agency
California Department of Public Health



September 4, 2020

TO: All Californians

SUBJECT: Guidance Related to Cohorts - UPDATED September 4, 2020

This guidance applies to groups of children and youth in controlled, supervised, and indoor environments operated by local educational agencies, non profits, or other authorized providers, including, but not limited to, public and private schools; licensed and license-exempt child care settings; organized and supervised care environments, i.e., "distance learning hubs"; recreation programs; before and after school programs; youth groups; and day camps. **Guidance and directives related to schools, child care, day camps, youth sports, and institutions of higher education are not superseded by this document and still apply to those specified settings.**

Purpose: To provide guidance for necessary in-person child supervision and limited instruction, targeted support services, and facilitation of distance learning in small group environments for a specified subset of children and youth, and for those programs to understand the required health and safety practices needed to prevent the spread of COVID-19 in their settings.

Definitions:

Cohort: a cohort is a stable group of no more than 14 children or youth and no more than two supervising adults (or a configuration of no more than 16 individuals total in the cohort) in a supervised environment in which supervising adults and children stay together for all activities (e.g., meals, recreation, etc.), and avoid contact with people outside of their group in the setting.

Supervising adult: an adult assigned to one cohort of children or youth, who does not physically interact with any other cohorts. This includes child care staff, certificated or classified school staff, volunteers, participating parent or caregiver, or other designated supervising adult(s).

Supervised care environment: an environment where multiple children or youth, from multiple families or households, are being supervised simultaneously by an adult. This includes, but is not limited to, licensed child care facilities, licensed exempt child care programs, supervised programs on a school site while a school is not in session or is providing curriculum in a distance-learning format, or where some educational services are being offered to a subgroup of students as identified by a local educational agency on a school campus.

Considerations for Cohorts

Utilizing cohorts minimizes the number of people exposed if a COVID-19 case is identified in a child or youth attendee, provider, other instructional support provider, or staff member of a particular cohort.

Children or youth, attendees and adults in supervised care environments during the COVID-19 pandemic must be in groups as small as possible. This practice decreases opportunities for exposure to or transmission of the virus; facilitates more efficient contact tracing in the event of a positive case; and allows for targeted testing, quarantine, and isolation of a single cohort instead of an entire population of children or youth and supervising adults in the event of a positive case or cluster of cases.

While present at the supervised care environment, children or youth and supervising adults in one cohort must not physically interact with children or youth and supervising adults in other cohorts, other child facility staff, or parents of children or youth in other cohorts.

Cohort Size

- Cohorts must be limited to no more than 14 children and youth and no more than two supervising adults, or a configuration of no more than 16 individuals total (children and youth or adults) in the cohort.
- Requirements for adult to child ratios continue to apply for licensed child care programs.
- Cohorts can be divided, as needed, into subgroups of children and youth from the same cohort, as long as the 14-to-2 ratio is not exceeded.
- The maximum cohort size applies to all children and youth in the cohort, even when all children are not participating at the same time. For example:
 - A cohort may not include 6 children or youth who attend full-time, 6 children on Mon/Wed/Fri, and 6 children on Tue/Thu (total of 18).
 - A cohort may not include 8 children or youth who attend for the entire day, 4 who attend mornings only, and 4 who attend afternoons only (total of 16).

Cohort Mixing

- Prevent interactions between cohorts, including interactions between staff assigned to different cohorts.
 - Assign children and youth who live together or carpool together to the same cohort, if possible.
 - Avoid moving children and youth from one cohort to another, unless needed for a child's overall safety and wellness.
 - Cohorts must be kept separate from one another for special activities such as art, music, and exercise. Stagger playground time and other activities so that no two cohorts are in the same place at the same time.
- The requirement to prevent interaction between cohorts can be met either by having each cohort in a separate room or space created by partitions.
- One-to-one specialized services can be provided to a child or youth by a support service provider that is not part of the child or youth's cohort.
- Specialized service includes but not limited to occupational therapy services, speech and language services, and other medical, behavioral services, or educational support services as part of a targeted intervention strategy.
- Services must be provided consistent with the industry guidance for Limited Services (PDF).

Considerations for Staff

Supervising adults should be assigned to one cohort and must work solely with that cohort, unless serving children five years of age and younger in which case an adult may be assigned to no more than 2 cohorts. Avoid changing staff assignments to the extent practicable. Substitute providers who are covering for short-term staff absences are allowed but must only work with one cohort of children per day.

Meetings among the staff from different cohorts must be conducted remotely, outdoors, or in a large room in which all providers wear cloth face coverings and maintain at least 6 feet distance from other providers. Outdoor meetings and meetings in large rooms with the windows open are preferred over meetings in small rooms with windows closed.

Precautions and Considerations

Physical distancing, in combination with the use of face coverings, decreases the risk of COVID-19 from respiratory droplets. Physical distancing between adults must be maintained as much as possible, and adults and students must use face coverings at all times, pursuant to the CDPH Schools Guidance regarding face coverings. Physical distancing between young children in the same cohort should be balanced with developmental and socio-emotional needs of this age group. Supervised care settings should follow applicable industry guidance on appropriate use of face coverings by children and youth.

See the CDPH Guidance on Schools and School Based Programs (PDF) and on Child Care (PDF) for additional considerations regarding, face masks, meals, cleaning, drop off and pick up and health screening.



EXHIBIT "43"

COVID-19

Blueprint for a Safer Economy

Last updated 9/8/20

California has a new blueprint for reducing COVID-19 in the state with revised criteria for loosening and tightening restrictions on activities. Every county in California is assigned to a tier based on its test positivity and adjusted case rate for tier assignment including metrics from the last three weeks. The detailed plan is below.

Additional information about the Blueprint:

- Find the status of activities in your county
- Understand which activities and businesses are open in the four tiers (PDF)
- Explore the complete data by county - California Blueprint Data Chart (Excel)

Plan for Reducing COVID-19 and Adjusting Permitted Sector Activities to Keep Californians Healthy and Safe

Updates as of 9/8/2020:

- Addition of a California Blueprint Data Chart (Excel) displaying: county tier status, date of tier assignment, health equity measure (pending), number of consecutive weeks meeting the next tier's criteria, case rates, adjusted case rate for tier assignment, testing positivity, and test rates. Data displayed is for the weeks ending August 22 and August 29.
- Clarification of the initial adjustment scale to case rate, including the addition of a table with case rate adjustment factors for tier assignment.
- Clarification of how counties will be assigned their status if tiers differ between reporting periods.
- Updated and consistent language throughout the Blueprint to distinguish between case rate and adjusted case rate for tier assignment.
- Addition of an appendix titled: Appendix 1: Calculation of metrics.

This guidance outlines an updated framework for a safe progression of opening more businesses and activities in light of the pandemic. The framework for this guidance is informed by increased knowledge of disease transmission vulnerabilities and risk factors and is driven by the following goals:

- 1) To progress in phases based on risk levels with appropriate time between each phase in each county so impacts of any given change can be fully evaluated.
- 2) To aggressively reduce case transmission to as low a rate as possible across the state so the potential burden of flu and COVID-19 in the late fall and winter does not challenge our healthcare delivery system's ability to surge with space, supplies and staff. Also, with winter weather pushing more activities indoors, low levels of transmission in the community will make large outbreaks in these riskier settings less likely.
- 3) To simplify the framework and lay out clear disease transmission goals for counties to work towards.

Tier Framework

This framework lays out the measures that each county must meet, based on indicators that capture disease burden, testing, and health equity. A county may be more restrictive than this framework. This framework also notes signals of concern, including impacted healthcare capacity that may lead towards a dimming intervention. This framework replaces the current County Data Monitoring metrics. As the COVID-19 pandemic continues to be an evolving situation and new evidence and understanding emerges, the California Department of Public Health (CDPH), in collaboration with other State officials, will continue to reassess metrics and thresholds.

See chart below for the framework metrics as set according to tiers based on risk of community disease transmission. Calculation of metrics is described in Appendix 1.

| Measure | Higher Risk → Lower Risk of Community Disease Transmission*** | | | |
|--|--|-----------------------|--------------------|-------------------|
| | Widespread Tier 1 | Substantial Tier 2 | Moderate Tier 3 | Minimal Tier 4 |
| Adjusted Case Rate for Tier Assignment** (Rate per 100,000 population* excluding prison cases^, 7 day average with 7 day lag) | >7 | 4-7 | 1-3.9 | <1 |
| Testing Positivity^ (Excluding prison cases^, 7 day average with 7 day lag) | >8% | 5-8% | 2.4.9% | <2% |

^Excludes state and federal inmates

*Population denominators from the Department of Finance: State Population Projections - Total Population by County- Table P-1

**Case rate will be determined using cases confirmed by PCR

*** Counties are assigned a tier based on two metrics: test positivity and case rate. The case rate is adjusted based on testing volume per 100,000 population as described below. Due to variability in data, this adjustment does not apply to small counties (defined as those with a population less than ~100,000 residents)

- For counties with testing volume above the state average, the factor is less than 1, decreasing in a linear manner from 1.0 to 0.6 as testing volume increases from the state average to 2x the state average. The factor remains at 0.6 if the testing volume is greater than 2x the state average.
- For counties with testing volume below the state average, the factor is greater than 1, increasing in a linear manner from 1.0 to 1.4 as testing volume decreases from the state average to zero. However, this adjustment for low testing volume will not be applied to counties with a test positivity < 3.5%.

California COVID-19 Case Rate Adjustment Factor

| Testing Volume | Case Rate Adjustment Factor* |
|-----------------------|------------------------------|
| 0 | 1.4 |
| 0.25*Average | 1.3 |
| 0.50*Average | 1.2 |
| 0.75*Average | 1.1 |
| Average | 1 |
| 1.25*Average | 0.9 |
| 1.5*Average | 0.8 |
| 1.75*Average | 0.7 |
| 2.0*Average and above | 0.6 |

- Counties with fewer than ~100,000 individuals will be exempted from case rate adjustments, and counties with test positivity <3.5% will be exempted from adjustment for testing rates lower than the state average.

If the two metrics are not the same tier, the county's tier assignment will be determined by the more restrictive of the two. For example, if a county's test positivity corresponds to tier 3 (orange, moderate), but the case rate corresponds to tier 1 (purple, widespread), the county will be assigned as tier 1.

Moving through the Tiers

Rules of the framework:

- After the initial assignments effective 8/31st, CDPH will assess indicators weekly and the next assignments were released on September 8, 2020.
- A county must remain in a tier for a minimum of three weeks before being able to advance to a less restrictive tier.
- A county can only move forward one tier at a time, even if metrics qualify for a more advanced tier.
- If a county's adjusted case rate for tier assignment and test positivity measure fall into two different tiers, the county will be assigned to the more restrictive tier.
- City local health jurisdiction (LHJ) data will be included in overall metrics, and city LHJs will be assigned the same tier as the surrounding county
- An LHJ may continue to implement or maintain more restrictive public health measures if the local health officer determines that health conditions in that jurisdiction warrant such measures.

Initial step applied on August 28, 2020:

- Each county was assigned to a tier based on an adjusted case rate and test positivity from the weeks of 8/11th and 8/18th. If a county's adjusted case rate and test positivity measures fell into two different tiers, the county was assigned the more restrictive tier. Similarly, if either adjusted case rate or testing positivity tiers differ between the two reporting periods, the county will be assigned the more restrictive tier.
- This tier status will be effective on Monday, August 31, 2020.
- If a county is initially assigned to Purple Tier 1 and has met the criteria for a less restrictive tier the prior week, the county only needs to meet the criteria for a less restrictive tier for one more week to move to the Red Tier 2. (For the September 8, 2020 assignment, a county does not need to remain in the Purple Tier 1 for three weeks. For all subsequent assessments, a county must remain in a tier for three weeks and meet the criteria to advance as described below.)

To advance:

- A county must have been in the current tier for a minimum of three weeks, except as described in the "Initial step applied on August 28, 2020" section above.
- A county must meet criteria for the next tier for both measures for the prior **two** consecutive weeks in order to progress to the next tier.
- In addition, the state will establish health equity measures on activities such as data collection, testing access, contact tracing, supportive isolation, and outreach that demonstrate a county's ability to address the most impacted communities within a county. Additional measures addressing health outcomes such as case rates, hospitalizations and deaths, will also be developed and tracked for improvement.

To move back:

- During the weekly assessment, if a county's adjusted case rate and/or test positivity has been within a more restrictive tier for two consecutive weekly periods, the county must revert to the more restrictive tier.
- At any time, state and county public health officials may work together to determine targeted interventions or county wide modifications necessary to address impacted hospital capacity and drivers of disease transmission, as needed.
- Counties will have three days to implement any sector changes or closures unless extreme circumstances merit immediate action.

Risk Criteria

Activities and sectors will begin to open at a specific tier based on risk-based criteria (PDF), as outlined below. Lower risk activities or sectors are permitted sooner and higher risk activities or sectors are not permitted until later phases. Many activities or sectors may increase the level of operations and capacity as a county reduces its level of transmission.

Criteria used to determine low/medium/high risk sectors

- Ability to accommodate face covering wearing at all times (e.g. eating and drinking would require removal of face covering)
- Ability to physically distance between individuals from different households
- Ability to limit the number of people per square foot
- Ability to limit duration of exposure
- Ability to limit amount of mixing of people from differing households and communities
- Ability to limit amount of physical interactions of visitors/patrons
- Ability to optimize ventilation (e.g. indoor vs outdoor, air exchange and filtration)
- Ability to limit activities that are known to cause increased spread (e.g. singing, shouting, heavy breathing; loud environs will cause people to raise voice)

Schools

Schools may reopen for in-person instruction based on equivalent criteria to the July 17th School Re-opening Framework (PDF) previously announced. That framework remains in effect except that Tier 1 is substituted for the previous County Data Monitoring List (which has equivalent case criteria to Tier 1). Schools in counties within Tier 1 are not permitted to reopen for in-person instruction, with an exception for waivers granted by local health departments for TK-6 grades. Schools that are not authorized to reopen, including TK-6 schools that have not received a waiver, may provide structured, in-person supervision and services to students under the Guidance for Small Cohorts/Groups of Children and Youth.

Schools are eligible for reopening fully for in-person instruction following California School Sector Specific Guidelines once the county is out of Tier 1 (and thus in Tier 2) for at least 14 days, which is similar to being off the County Data Monitoring List for at least 14 days. As noted above, an LHJ may continue to implement or maintain more restrictive public health measures if the local health officer determines that health conditions in that jurisdiction warrant such measures.

As stated in the July 17th School Re-opening Framework (PDF), schools are not required to close if a county moves back to Tier 1, but should consider surveillance testing of staff.

County Data Adjudication Process

If a county finds that there is discrepancy between the county's and state's calculated data for the above defined measures, the county shall notify the CDPH Local Coordinator. The county may request a meeting to discuss with local and state epidemiology leads to compare data. In addition, CDPH will work with California Conference of Local Health Officers and County Health Executives Association of California to develop other methodologies to assess qualitative and contextual information impacting these metrics and the most appropriate interventions.

Once a discrepancy is adjudicated by CDPH, any updated tier status will be determined by CDPH and the tier status will be reflected on the public website within 48 hours, as appropriate.

APPENDIX 1: Calculation of metrics

| Metric | Definition |
|---|---|
| Case Rate (rate per 100,000 excluding prison cases, 7-day average with 7-day lag) | Calculated as the average (mean) daily number of COVID-19+ cases, excluding cases among persons incarcerated at state or federal prisons (identified as cases with an ordering facility name or address associated with prison locations), over 7 days (based on episode date), divided by the number of people living in the county/region/state. This number is then multiplied by 100,000. Due to reporting delays, there is a 7 day lag built into this calculation. For example, for data updated through 8/22/20, the case rate will be dated as 8/15/20 and will include the average case rate from 8/9/20 - 8/15/20. |
| Adjusted Case Rate for Tier Assignment (rate per 100,000 excluding prison cases, 7-day average with 7-day lag) | Calculated as the Case Rate per 100,000 multiplied by the Case Rate Adjustment Factor that is based on the county's testing rate per 100,000. |
| Testing Positivity (excluding prison cases, 7-day average with 7-day lag) | Calculated as the total number of positive polymerase chain reaction (PCR) tests for COVID-19 over a 7-day period (based on specimen collected date) divided by the total number of PCR tests conducted (excludes tests for persons out of state or with unknown county of residence), excluding tests for persons incarcerated at state or federal prisons (identified as cases with an ordering facility name or address associated with prison locations). This number is then multiplied by 100 to get a percentage. Due to reporting delay (which may be different between positive and negative tests), there is a 7-day lag. Example: For cumulative lab data received on 8/22/20, reported test positivity is dated as 8/15/20 and is calculated based on tests with specimen collection dates from 8/9/20 - 8/15/20. |
| Test Rate (tests per 100,000 excluding prison cases, 7-day average with 7-day lag) | Calculated as average (mean) number of polymerase chain reaction (PCR) tests per day over a 7-day period (based on specimen collection date), excluding tests for persons incarcerated at state or federal prisons (identified as cases with an ordering facility name or address associated with prison locations), and divided by the number of people living in the county/region/state. This number is then multiplied by 100,000. Due to reporting delay, there is a 7-day lag included in the calculation. Example: For cumulative lab data received through 8/22/20, the reported 7-day average number of tests will be dated as 8/15/20 and will include PCR tests with specimen collection dates from 8/9/20 - 8/15/20. |

Helpful Links

- Find the status of activities in your county
- Understand which activities and businesses are open in the four tiers (PDF)
- Explore the complete data by county (Excel)
- School Re-opening Framework (PDF)
- Guidance for Small Cohorts/Groups of Children and Youth
- www.covid19.ca.gov

EXHIBIT "44"



County of Fresno

DEPARTMENT OF PUBLIC HEALTH

County of Fresno

Department of Public Health

ORDER OF THE HEALTH OFFICER

August 28, 2020

Pursuant to California Health and Safety Code Sections 101040, 120175, and 120175.5(b) the Health Officer of the County of Fresno orders as follows:

1. This order is issued as a result of the direct violation of the Closure Order issued on August 13, 2020, and continued violations through August 28, 2020.
2. Effective August 28, 2020, the following will be in effect:
 - A. All Immanuel Schools shall:
 - i. On a daily basis, screen any person who enters the campus for any purpose, for febrile respiratory illness; and
 - ii. Exclude from campus all employees, students, faculty, or administrators that report symptoms of febrile respiratory illness for ten days from the day that they are identified as having symptoms and until 24 hours after improvement of symptoms or fever without the use of fever-reducing medications; and
 - iii. Within 24 hours, report to the Fresno County Department of Public Health any person who enters the campus for any purpose, whether students, faculty, administrators, parents, or anyone else allowed on campus, who is showing signs of a febrile respiratory illness or showing symptoms of COVID-19; and
 - iv. For the purpose of this order, a febrile respiratory illness is defined as “a new or worsening episode of either cough or shortness of breath, presenting with fever (temperature 38 degrees C or 100.4 degrees F or higher) or chills in the previous 24 hours;” and
 - v. Symptoms of COVID-19 include any of the following:
 - (1) fever or chills
 - (2) cough
 - (3) Shortness of breath or difficulty breathing
 - (4) Congestion or runny nose
 - (5) Repeated shaking/ tremors

Promotion, preservation and protection of the community's health

1221 Fulton Street /P. O. Box 11867, Fresno, CA 93775

(559) 600-3200 • FAX (559) 600-7687

The County of Fresno is an Equal Employment Opportunity Employer

www.co.fresno.ca.us • www.fcdph.org

(6) Muscle pains or body aches

(7) Headache

(8) Sore throat

(9) New loss of taste or smell

(10) Nausea, vomiting or diarrhea

- B. All Immanuel Schools shall comply with Department of Public Health Investigation and Guidance Requests in a timely manner when individuals who enter the Immanuel Schools campus(es) are confirmed with a COVID infection.
 - C. If for any reason COVID-19 related testing is done on campus or sponsored by Immanuel Schools, they shall provide testing results for individuals who are tested at their premises as soon as these are available
 - D. Department of Public Health, and/or the Public Health Officer may modify this guidance based on other factors.
3. For the purpose of this order:
- A. Close contact is defined as someone who has spent 15 minutes or more time within 6 feet or less of the index person while unmasked;
 - B. Social distancing is defined as “maintain a six-foot separation from all persons except for family members;”
4. The California Department of Public Health (CDPH) and the Centers for Disease Control and Prevention (CDC) may recommend further guidance.

I, as Interim Health Officer for the County of Fresno, encourage voluntary compliance with this Health Officer’s Order. However, violation of this order is subject to fine, imprisonments or both (California Health and Safety Code Section 120295.)

Violation of or failure to comply with this Order is punishable by fine, imprisonment or both under various criminal statutes:

Cal. Penal Code section 148 makes it a misdemeanor to resist, delay, or obstruct a public officer, in the discharge of his or her duty. Sheriff deputies and city police officers are authorized to enforce health orders in the discharge of his or her duty.

Cal. Penal Code section 69 may be charged as a felony for the attempt, by means of any threat or violence, to deter or prevent an executive officer from performing any duty imposed by law, or to knowingly resist, by the use of force or violence, the officer, in the performance of the officer's duty. Sheriff deputies and city police officers are authorized to enforce health orders in the discharge of his or her duty.

Cal. Penal Code section 409.5 allows the health officer to close an area where a calamity has created an immediate menace to public health.

California Health and Safety Code sections 120275 and 120295 makes it a misdemeanor to violate certain sections of the Health and Safety Code, including those requiring individuals to comply with health orders to facilitate isolation or quarantine.

Rais Vohra MD

Rais Vohra MD
Health Officer

8/28/2020

Date

EXHIBIT "45"

Sort by Positive Cases

Note: Numbers do not represent true day-over-day change as these results include cases prior to yesterday.

Positive Cases by County

| | |
|-----------------|---------------|
| Los Angeles | 249,876 |
| Riverside | 54,320 |
| Orange | 49,394 |
| San Bernardino | 49,264 |
| San Diego | 41,326 |
| Kern | 29,925 |
| Fresno | 26,724 |
| Sacramento | 19,474 |
| Alameda | 19,399 |
| San Joaquin | 18,799 |
| Santa Clara | 18,759 |
| Stanislaus | 15,469 |
| Contra Costa | 14,816 |
| Tulare | 14,787 |
| Ventura | 11,497 |
| Imperial | 10,233 |
| San Francisco | 9,996 |
| Santa Barbara | 8,528 |
| Monterey | 8,527 |
| San Mateo | 8,478 |
| Merced | 8,441 |
| Kings | 6,721 |
| Sonoma | 6,397 |
| Marin | 6,321 |
| Solano | 5,680 |
| Madera | 3,926 |
| Placer | 3,222 |
| San Luis Obispo | 3,131 |
| Yolo | 2,604 |

Fresno CASES

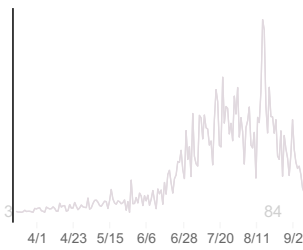
26,724

| | | |
|---------|---------|----------|
| 1 Day Δ | 7 Day Δ | 14 Day Δ |
| +84 | +939 | +2,653 |
| +0.3% | +3.6% | +11.0% |

| | | |
|------------|-------------|-----------------|
| 7 Day Avg. | 14 Day Avg. | Weekly % Change |
| 134 | 190 | -45.2% |

US Total Cases: 6,310,663

Day-Over-Day New Cases



Gender

| | |
|---------|-----|
| Female | 51% |
| Male | 49% |
| Unknown | 1% |

Age

| | |
|---------|-----|
| 0-17 | 10% |
| 18-49 | 60% |
| 50-64 | 19% |
| 65+ | 11% |
| Missing | 0% |

| = California Population %

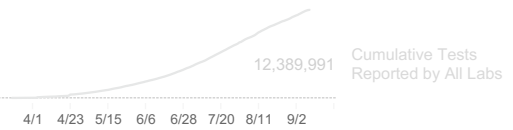
Race/Ethnicity

| | |
|------------|-----|
| AIAN | 0% |
| Asian | 6% |
| Black | 4% |
| Latino | 61% |
| NHPI | 1% |
| White | 17% |
| Multi-Race | 1% |
| Other | 11% |

CALIFORNIA TESTING RESULTS

12,389,991

| | | |
|---------|------------|--------------|
| 1 Day Δ | 14 Day Δ | Positivity: |
| +46,194 | +1,471,576 | 7 Day: 3.5% |
| +0.4% | +13.5% | 14 Day: 4.0% |



Fresno DEATHS

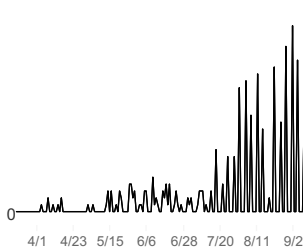
326

| | | |
|---------|---------|----------|
| 1 Day Δ | 7 Day Δ | 14 Day Δ |
| +0 | +36 | +87 |
| +0% | +12.4% | +36.4% |

| | | |
|------------|-------------|-----------------|
| 7 Day Avg. | 14 Day Avg. | Weekly % Change |
| 5 | 6 | -29.4% |

US Total Deaths: 189,147

Day-Over-Day New Deaths



Gender

| | |
|---------|-----|
| Female | 42% |
| Male | 57% |
| Unknown | 0% |

Age

| | |
|---------|-----|
| 0-17 | 0% |
| 18-49 | 7% |
| 50-64 | 19% |
| 65+ | 74% |
| Missing | 0% |

| = California Population %

Race/Ethnicity

| | |
|------------|-----|
| AIAN | 0% |
| Asian | 12% |
| Black | 8% |
| Latino | 49% |
| NHPI | 0% |
| White | 30% |
| Multi-Race | 1% |
| Other | 1% |

Note: Any instance of a negative number of cases or deaths reflects a correction to previous reporting.

Note: Demographic percentages may not add up to 100% due to rounding. Breakdown of deaths is a subset of total deaths as reported by law enforcement.

EXHIBIT "46"

Year: 2020–2021 – Grade:

Re-enrollment

Tuition Contract / Acknowledgment

Acknowledgement of 2020-21 Tuition and Fees:

| | | | |
|-----------------------|---------|---|---------|
| High School Tuition - | \$9,385 | Student Activity Fee (all grade levels) - | \$150 |
| Jr. High Tuition - | \$7,875 | *Transportation Fee (one rider) - | \$800 |
| Elementary Tuition - | \$6,705 | *Transportation Fee (2 or more riders) - | \$1,000 |

(*family is charged only one of these fees)

Jr. High and High School Class and Sports Fees - see 2020-21 student fee and spirit pack fee schedule

Books, Apps, PE Clothes and other class required materials - see 2020-21 books/apps list

Acknowledgement of 2020-21 Discounts:

Pastoral Discount – 50% tuition discount (see business office for complete details and eligibility)

MB Membership Discount - \$650 tuition discount (HS only) signed verification form required.

FACTS Tuition Management:

Tuition charges, sports fees, class fees, applicable discounts and payments will be posted and processed through FACTS tuition management (via FACTS family portal). All billing notices and payment correspondence will come to families through their FACTS account. Please choose the correspondence method that best suits your lifestyle (email, text or both) as a \$25 late fee will be charged on all late payments. Parents/Guardians are responsible for keeping their personal and contact information in the FACTS family portal up to date.

Payment Plan Information

Annual: Payment due in July

Semi Annual: 1st Semester due in July

2nd Semester due in January

Monthly: Monthly plan starting in July and ending in May or June.

If you have a SENIOR, you must select the payment plan ending in May.

Monthly plan starting in August and ending in May or

June.

If you have a SENIOR, you must select the payment plan ending in May

Collection Policy

A tuition account shall be considered delinquent 30 days after the date of invoice. The delinquent account holder shall be notified and given the following options:

1. Bring the account current within 10 days after notification.
2. Make payment arrangements within 10 days after notification with the Immanuel Schools Business office.

Failure to comply with one of these options, shall at the election of Immanuel Schools, result in the interruption of the student's education, which may include without limitation; termination of the student's attendance at Immanuel Schools, restricting the student from final exams, grades not being released or the student being prohibited from readmittance. Delinquent accounts may be transferred to a third party collection entity. The cost of collection, including reasonable attorney fees shall be paid by the delinquent account holder.

Late Enrollment / Early Withdrawal:

A student who enrolls during any part of a month, after the start of school, shall pay that month's full amount of tuition.

Tuition will be pro-rated to the end of the month of the last date attended for any student who withdraws during the school year.

As student who withdraws prior to the first day of school will receive a refund of any tuition paid less an administrative fee of \$250.

Year: 2020-2021 - Grade:

I HAVE READ AND FULLY UNDERSTAND AND AGREE TO THE TERMS SET FORTH IN THIS CONTRACT.

Yes No

Check here for Parent/Guardian Signature Name:

Check here for Parent/Guardian Signature Name:



Immanuel Schools

Upcoming Payments

[View Full Schedule](#)

[Expand All](#) | [Collapse All](#)

Due Date: 15 Sep 2020

[Payment Plans \(115 079 949\)](#)

Amount Due: \$20,565.00

Term: 2020-2021 School Year

| ACCOUNT | CHARGES | PAYMENTS | AMOUNT DUE |
|--------------------|------------|----------|------------|
| Fee - K-6 Activity | \$150.00 | \$0.00 | \$150.00 |
| Fee - K-6 Tuition | \$6,705.00 | \$0.00 | \$6,705.00 |
| Fee - K-6 Activity | \$150.00 | \$0.00 | \$150.00 |
| Fee - K-6 Tuition | \$6,705.00 | \$0.00 | \$6,705.00 |
| Fee - K-6 Activity | \$150.00 | \$0.00 | \$150.00 |
| Fee - K-6 Tuition | \$6,705.00 | \$0.00 | \$6,705.00 |

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PROOF OF SERVICE

County of Fresno v. Immanuel Schools, et al.
Fresno Superior Court Case No. 20CECG02447


I am an employee in the County of Riverside. I am over the age of 18 years and not a party to the within entitled action; my business address is 25026 Las Brisas Road, Murrieta, California 92562.

On September 11, 2020, I served a copy of the following document(s) described as **VERIFIED CROSS-COMPLAINT FOR A VIOLATION OF THE EQUAL PROTECTION CLAUSE OF THE CALIFORNIA CONSTITUTION; FOR A VIOLATION OF THE CONTRACTS CLAUSE OF THE CALIFORNIA CONSTITUTION; FOR A VIOLATION OF THE FOURTEENTH AMENDMENT OF THE U.S. CONSTITUTION; AND DECLARATORY AND INJUNCTIVE RELIEF** on the interested party(ies) in this action as follows:

SEE ATTACHED SERVICE LIST

- BY E-MAIL OR ELECTRONIC TRANSMISSION.** Based on a court order or an agreement of the parties to accept service by e-mail or electronic transmission, I transmitted copies of the above-referenced document(s) on the interested parties in this action by electronic transmission. Said electronic transmission reported as complete and without error.
- BY FACSIMILE TRANSMISSION.** Pursuant to agreement and written confirmation of the parties to accept service by facsimile transmission, I transmitted copies of the above-referenced document(s) on the interested parties in this action by facsimile transmission from (951) 600-4996. A transmission report issued as complete and without error.
- BY UNITED STATES POSTAL SERVICE.** I am readily familiar with the practice for collection and processing of correspondence for mailing and deposit on the same day in the ordinary course of business with the United States Postal Service. Pursuant to that practice, I sealed in an envelope, with postage prepaid and deposited in the ordinary course of business with the United States Postal Service in Murrieta, California, the above-referenced document(s).
- BY OVERNIGHT DELIVERY.** I enclosed the above-referenced document(s) in an envelope or package provided by an overnight delivery carrier and addressed as above. I placed the envelope or package for collection and overnight delivery at an office or a regularly utilized drop box of the overnight delivery carrier.
- BY PERSONAL SERVICE.** I caused copies of the above-referenced documents to the addressee(s) noted above served by process server.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct and that I am an employee in the office of a member of the bar of this Court who directed this service.



Shelly Padilla

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SERVICE LIST

County of Fresno v. Immanuel Schools, et al.
Fresno Superior Court Case No. 20CECG02447

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Attorneys for Plaintiff, COUNTY OF
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Emergency Services Director and County
Administrative Officer