

District Readiness Index Companion Report



Executive Summary

As [recent NAEP scores](#) after the pandemic have made clear, districts everywhere face an urgent need to accelerate student learning. The District Readiness Index (DRI), a new research-based tool from [Pivot Learning](#), demonstrates that some districts are far better positioned to do so. By identifying a set of key organizational factors that measure a district's organizational health, the DRI can guide districts on where to focus their efforts and resources in order to drive better student outcomes.

Billions of dollars have been spent on school improvement over the last few decades, yet efforts to scale and sustain even the most effective education initiatives have floundered. Historically, much of the work to improve schools has been focused on the work of principals and teachers and has ignored the health of the organizations in which they work. In 2018, Pivot Learning set out to identify the conditions that actually can assess whether school districts will be able to successfully innovate and implement lasting change.

Drawing from decades of research, ongoing conversations with experts, established frameworks and insights from other fields including the private sector, and extensive lessons from the field, our researchers identified five domains associated with school district organizational readiness for improvement and innovation:

- **Family & Community Engagement;**
- **Financial Management;**
- **Leadership & Governance;**
- **School Personnel; and**
- **Work Environment.**

Within each of these domains, our research team explored hundreds of potential indicators before identifying the DRI's 30 key indicators of district readiness. Today the DRI uses publicly available data from more than 420 California school districts with more than 2,500 students to assess the organizational health of each.

This report provides background on the history and the purpose of the DRI and highlights key findings gleaned from descriptive and correlational analyses of its inaugural wave of data, including the following:

- A broad range of districts across California have the organizational foundations to initiate and sustain innovative efforts to improve student outcomes. Importantly, over 70 school districts exemplify district readiness across all organizational conditions for improvement.
- Across California, school districts with lower levels of organizational readiness 1) are more likely to be located in urban areas, 2) enroll more students, and 3) serve greater shares of historically marginalized students.

- Despite some outliers, greater levels of district readiness are generally associated with higher English language arts and math student achievement.
- Even when holding constant important student demographics and structural features, organizational conditions related to district readiness are associated with greater ELA and math outcomes.

Pivot Learning's work on the DRI has implications far beyond California. Our findings indicate that for educators to successfully teach students, districts and their communities must focus on and strengthen the foundational organizational conditions for improvement and innovation. The DRI presents a robust set of information for educators, community members, funders, and families to gauge these conditions. Stakeholders can now find ways to leverage this information for sustainable improvement. Our students' futures depend on it.

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Introduction

School and district leaders, community members, education service providers, funders, and parents share an interest in improving student outcomes. However, decades of effort and billions of dollars of investment—particularly from philanthropy and at the federal level—have long concluded that sustained improvement in student outcomes is vexingly challenging (Hess, 1998; Stecher et al., 2018; Tyack & Cuban, 1995). Even initially impactful efforts are not readily sustained, and community stakeholders rarely have insights into why.

Drawing from established research and insights from other fields, including the private sector, Pivot Learning initiated a series of investigations into the important organizational conditions that ensure a school district’s readiness to initiate and sustain educational improvement and innovation. As such, *district readiness* is a unique framework incubated at Pivot Learning with long forerunners in education research and evaluation (Hoy & Hannum, 1997; Hitt et al., 2018; Leithwood et al., 2019; Lynch et al., 2019; Malen et al., 2015).

This report outlines the background to the District Readiness Index (hereafter, DRI), including its history and purpose, and presents key findings identified in its inaugural wave of data. Our evidence illustrates that a broad range of districts across California have the organizational foundations to initiate and sustain innovative efforts to improve student outcomes.

The District Readiness Index

In this section, you will learn about the DRI's background, including its history, purpose, and intended use, and an overview of the data collection methodology researchers used to develop Domain Ratings and District Readiness Ratings. Domain Ratings are the five area-specific ratings calculated from Indicator scores, a trinary points system based on collected school district data values and evidence-driven thresholds. Domain Ratings are then used to generate the District Readiness Rating, the overall assessment of the district's readiness to initiate and sustain change initiatives that improve student outcomes including student achievement. Although we concisely explain our principles and procedures for collecting data and generating ratings in this report's Methodology section, our approach's details can also be found on the [DRI's Methodology webpage](#).

Background

In June 2018, Pivot Learning convened district leaders, policymakers, and education researchers to explore the relationship between a school district's organizational conditions and its ability to improve student achievement.

Throughout 2019 and 2020, researchers at Pivot Learning leveraged insights from this initial convening and assessed the potential of hundreds of indicators to measure a school district's organizational readiness for improvement. These early investigations explored data across California, Massachusetts, and Idaho.

At the onset of the COVID-19 pandemic, Pivot Learning researchers transitioned their work in Idaho to Idaho Education News and paused data collection for Massachusetts as they focused their attention on California.

After reviewing decades of research¹ and iterative conversations with a broad range of field experts, Pivot Learning identified five domains especially associated with organizational readiness, each guided by its own central question:

- 1. Family & Community Engagement:** Do district decision-making processes, resources, and capacities provide local stakeholders a seat at the table?
- 2. Financial Management:** Does the district maintain sufficient financial flexibility to invest in sustainable reforms?

¹ See a review of the research at the DRI's Methodology webpage.

3. **Leadership & Governance:** Do district leaders persist in their positions and adopt policies to sustain major initiatives?
4. **School Personnel:** Has the district adequately and equitably recruited personnel and retained them in its schools?
5. **Work Environment:** Does the district demonstrate the ability to collaborate with its teachers' union and its investment in educators?

Throughout 2021 and 2022, researchers reviewed the literature for validated measures associated with these organizational domains, piloted and refined data definitions and collection strategies, and ultimately collected and ensured the quality of data for conventional California school districts that enrolled 2,500 or more students during SY 2019-20.² Data were collected from a range of sources, including the California Department of Education's administrative databases, the National Center of Education Statistics's data, and unique information pulled from school district websites and other online sources. During this process, Pivot Learning researchers also consulted prospective users among school districts and other education leaders, community organizations, and parents of schoolchildren to ensure the DRI's usefulness and relevance. Their insights informed key decisions in the DRI's design and construction.

In 2022 at data collection's end, researchers collaborated with website designers and developers to construct a user-friendly online data dashboard for users to explore the DRI's inaugural wave of data.

Purpose and Intended Use

Incubated at Pivot Learning, the DRI is an innovative tool that integrates various publicly available data associated with a school district's organizational readiness for education improvement. We define district readiness as *the capacity for an organization to initiate and sustain changes that facilitate improvements in a select set of outcomes*.

The connection between organizational readiness and sustainable improvement is a well-established concept in other sectors. In education, we believe, and research and experience tell us, that the internal systems of school districts and their subsidiary organizations (i.e., schools) play an important role in their ability to improve student learning (Anderson & Young, 2018; Blazar & Schueler, 2022; Florian et al., 2000). The DRI aims to leverage this framework to identify the organizational conditions necessary to consistently "move the needle" on a range of student outcomes.

² The 2,500 enrollment threshold was used to focus on a manageable data collection scope, and because school districts with enrollments below this threshold yielded enough one-school districts to distort indicator collection procedures.

The DRI:

- Provides contextual information about a district’s readiness to implement and sustain improvement initiatives;
- Highlights district-level strengths;
- Identifies areas where district leaders can make meaningful improvements; and
- Enables comparisons and performance benchmarking across regions and between similar districts.

Whereas state-level data systems focus on standard outcome measures like student assessment scores, the DRI aggregates district-level data on the conditions associated with improvement and innovation. Rather than solely focus on classroom and school measures for accountability purposes, the DRI shifts the attention of education stakeholders to the district-level conditions necessary to support the efforts of school leaders, teachers, and parents.

Methodology

Once the DRI’s purposes were defined, researchers clarified key principles and procedures to make the prospective database useful to educators, community members, and students and their families.

Five guiding principles informed the DRI’s development. Specifically, metrics had to be:

- **Actionable**, so district leaders can leverage insights from the DRI to make meaningful changes at their district;
- **Publicly accessible**, so district partners and community members can easily access this information year over year;
- **Evidence-driven**, so all audiences can trust that these features matter for district success;
- **Standardized**, so district leaders can benchmark progress over time; and
- **Collaborative**, so district leaders, parents, and key partners can work together for sustained organizational improvement.

After exploring hundreds of potential indicators across the five domains, Pivot Learning researchers identified and collected information for 30 key indicators of district readiness. The DRI’s inaugural release includes this information for all conventional³ California school districts that enrolled 2,500 or more students in the 2019-20 school year, for a total of 423 California school districts.

³ We define “conventional” as a catchall term for publicly funded, publicly operated school districts. In the California Department of Education administrative databases, these school districts’ District Types are coded as “Elementary,” “Unified,” or “High School Districts.” Given different policy and governance arrangements for other types of local educational agencies, we do not include them in the database.

Table 1*Pearson Correlation Matrix for Domain Readiness Scores*

	1	2	3	4	5
1 Family & Community Engagement					
2 Financial Management	0.11*				
3 Leadership & Governance	0.03	0.09			
4 School Personnel	0.17***	0.00	0.07		
5 Work Environment	0.04	0.03	-0.10*	-0.01	-

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Once all relevant data were collected, researchers converted the raw measures into Indicator scores wherein districts earned 2 points for meeting the thresholds for readiness found in the literature and other evidence, 1 point for meeting some of the requirements, and 0 points for meeting none of the requirements. Those scores were then used to calculate Domain Ratings by dividing the share of points earned on each domain out of the total points possible. Metrics with missing information were dropped from the total points possible so as to avoid penalizing or protecting school districts.

Our initial analyses focused on ensuring each construct measures a unique organizational condition. To evaluate the DRI domain constructs' relative independences, we conducted Pearson correlations presented in Table 1. Few significant associations in the above matrix illustrate that in general these measures are relatively independent from each other. However, three associations are significantly correlated:

- School districts with higher School Personnel scores are significantly likely to earn higher ratings on Family & Community Engagement, and vice versa ($p < 0.01$).
- School districts with strong Financial Management practices are similarly likely to have higher Family & Community Engagement scores.
- Conversely, school districts with stronger Leadership & Governance practices are likely to evidence weaker Work Environments.

The magnitudes of these correlations, however, are very small and not practically meaningful. This should give confidence that each domain captures sufficiently distinct aspects of district readiness.

When taken together, measures of each domain's different aspects provide a baseline for how ready a school district is to implement and sustain changes. By systematically measuring and assessing different conditions of organizational readiness, key stakeholders can identify areas of strength and in need of improvement to facilitate necessary changes that will promote improvement and innovation.

Findings from the District Readiness Index

This section provides an overview of some key findings about the state of California school districts' readiness to improve and innovate. It also reports some initial evidence that these organizational conditions are associated with significantly greater student performance measures, suggesting that efforts to strengthen the former are an important strategy to improve the latter. Taken together, these analyses endeavor to better understand and begin to establish the DRI's validity as a useful measure of important district-level organizational conditions.

Finding #1: Most California districts exhibit at least some, if not many, organizational conditions critical to implement and sustain educational improvement and innovation. Importantly, over 70 exemplary school districts have strong foundations in all organizational conditions.

Figure 1 presents the share of all DRI districts in each District Readiness Rating. The percentage of districts is measured on the x-axis, and the District Readiness Ratings are listed on the y-axis. As evidenced in Figure 1, the vast majority of districts across California are rated to have Partial Foundations or Strong Foundations to Improve Education. Just 5% of districts are rated to have Few Foundations to Improve Education.

Examining the component parts of the District Readiness Rating reveals a similar pattern. Although the majority of districts have Partial Foundations for overall district readiness, the majority of districts in all domains are rated "Ready." This means that most districts have some room to grow on at least two organizational conditions. Notably, however, over 70 school districts have Strong Foundations in all organizational conditions; a list of these exemplary school districts can be found in Appendix 1.

California's districts have the most room for growth in School Personnel and Family & Community Engagement. Around 10% of districts have Few Foundations in each of these domains. Moreover, about 1 in 3 districts have Partial Foundations in each of these domains. These ratings emphasize the long-raised concerns about staffing exacerbated by the COVID-19 pandemic (Carver-Thomas & Darling-Hammond, 2017; Carver-Thomas et al., 2020; Hart Research Associates, 2022; Kini & Podolsky, 2016; Reed et al., 2006). Similarly, the frustrations of community organizations with district family and community engagement efforts appear to be at least partially supported by the DRI's ratings (Families in Schools, 2013, 2016; Hahnel, 2014).

Figure 1

Distribution of DRI Districts by District Readiness Rating

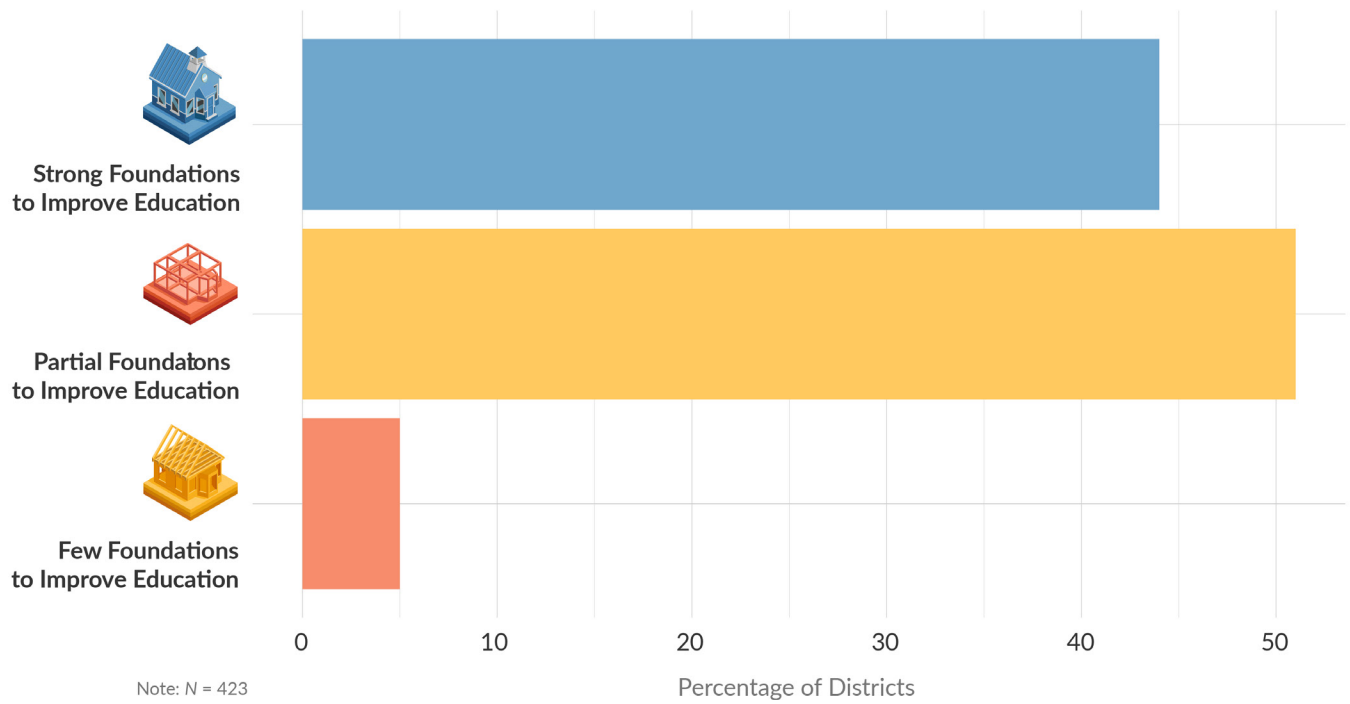
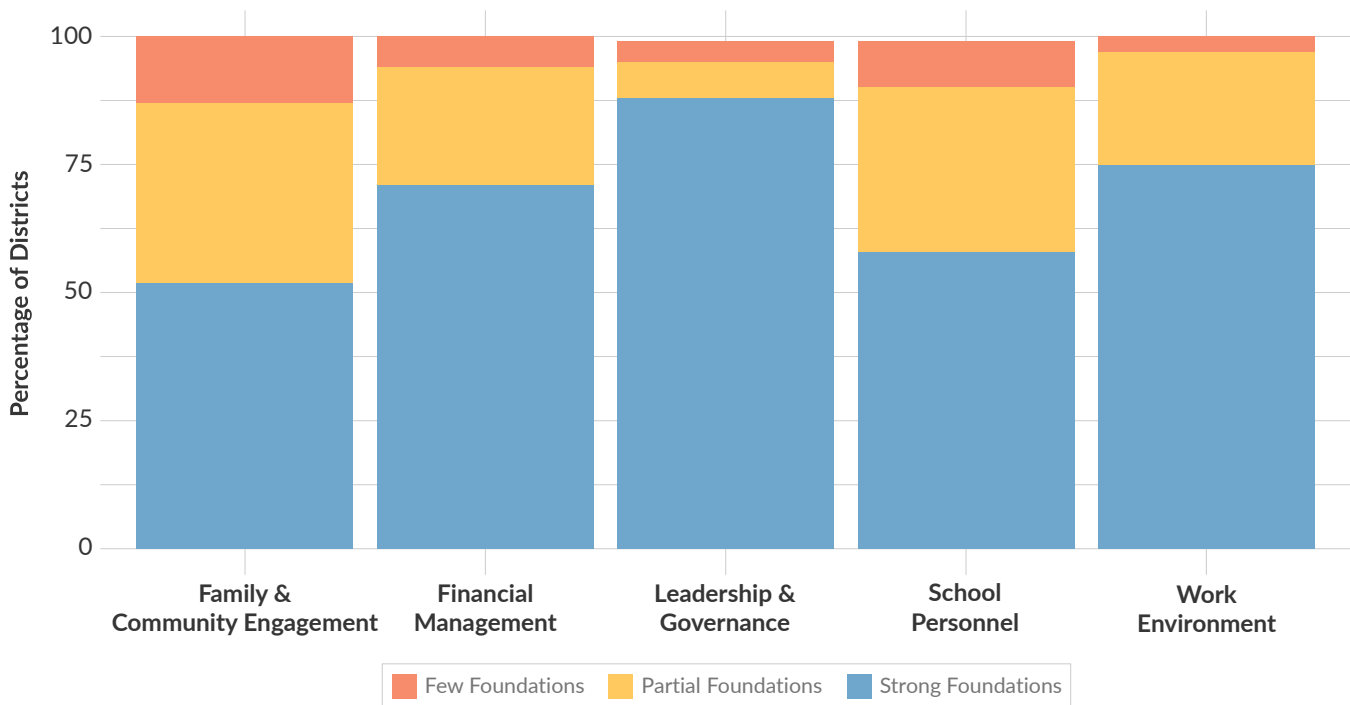


Figure 2

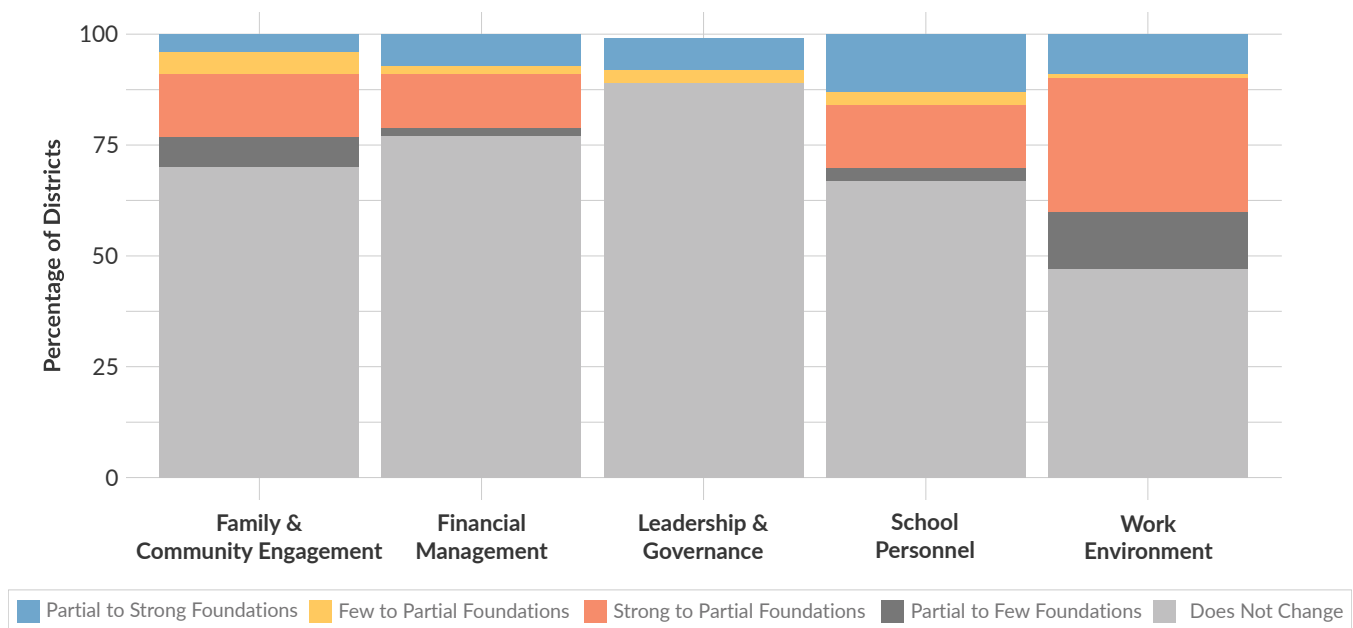
Distribution of DRI Districts by Domain Ratings



Analysts also evaluated the fidelity of these ratings. That is, what share of districts might earn a different rating if they gained or lost an Indicator point? Across nearly every domain, no fewer than 60% of districts would retain their rating if they lost or gained an Indicator point. Work Environment eludes this pattern wherein only a plurality of districts (45%) would retain their rating regardless if they gained or lost an Indicator point. Three in ten and just over one in ten districts would move from Strong to Partial Foundations and Partial to Few Foundations if they lost one Indicator point, respectively. Conversely, only 10% of districts would move up a rating if they gained an Indicator point. In sum, these findings add confidence that the DRI’s ratings accurately capture school districts’ organizational readiness for innovation and improvement.

Figure 3

Distribution of Cusp Districts by Domain Rating



Note: "Cusp Districts" are defined as districts that would move up or down a Domain Rating if they earned or lost one Indicator Point. Calculations hold constant the total number of points possible.

Finding #2: Across California, district readiness follows historical patterns of underperformance associated with district size, locale, and populations served.

Patterns in student underperformance are no secret in education (Reardon, 2011). Researchers wondered if such patterns were predictable in district organizational readiness. Tables 2 and 3 display summary statistics for the entire DRI sample and by District Readiness Rating.

Table 2*Summary Statistics for DRI Sample*

	N = 423				
	Mean	SD	Min	Med	Max
# Schools	19.60	51.70	2.0	12.0	1,010.0
# Students	13,345.30	31,062.00	2,515.0	7,924.0	596,937.0
District Type					
Elementary School District	143	33.80%			
High School District	47	11.10%			
Unified School District	233	55.10%			
Locale					
Rural	19	4.50%			
Town	53	12.50%			
Suburban	223	52.70%			
City	128	30.30%			
% Student Need	58.20	24.90	2.0	62.0	99.0
% Student Poverty	54.70	25.50	2.0	58.0	98.0
% English Learners	18.70	12.80	1.0	16.0	65.0
% African American	3.90	5.00	0.0	2.0	37.5
% Asian	9.50	13.10	0.0	4.3	72.4
% Hispanic or Latino	53.20	26.10	4.0	52.2	99.1
% White	24.90	19.70	0.2	20.1	77.7
% Other Race or Ethnicity	8.50	5.60	0.0	7.8	38.2

District Readiness Ratings by urbanicity generally follow hypothesized patterns based on prior research. Although districts in suburban areas encompass nearly 53% of all DRI districts, they account for 58% of all districts with Strong Foundations. Conversely, districts located in cities are practically more likely to be rated with Few Foundations relative to their sample prevalence; indeed, urban districts encompass the plurality of districts with Few Foundations. Relatedly, large school districts are especially likely to have Few Foundations: whereas the average district with Partial and Strong Foundations enroll about 11,500 students, the average district with Few Foundations is nearly four times larger. As outlined in Finding #1, readers should remember the DRI includes few districts with Few Foundations ($N = 23$), such that the averages are more likely to be affected by outliers. Indeed, the United States' second largest school district, Los Angeles Unified's more than 595,000 students, greatly inflates the average district's enrollment. But examining statistics less vulnerable to skewing by outliers like the median reveals a similar, albeit less drastic, pattern: the median district with Few Foundations enrolls 70% more students than the median district with Strong Foundations, and about 27% more students than the median district with Partial Foundations. Like in standard performance measures, California's larger districts are more likely to have fewer foundations for improvement and innovation.

Table 3
Summary Statistics by District Readiness Rating

	Few Foundations to Improve Education N = 23							Partial Foundations to Improve Education N = 216							Strong Foundations to Improve Education N = 184						
	Mean	SD	Min	Med	Max	Mean	SD	Min	Med	Max	Mean	SD	Min	Med	Max	Mean	SD	Min	Med	Max	
Schools	70.60	207.40	6.00	14.0	1,010.00	17.10	18.20	2.00	12.50	219.00	16.10	15.70	2.00	10.50	106.00						
Students	41,440.80	122,165.60	2,828.00	11,672.0	596,937.00	11,830.00	12,322.70	2,530.00	8,611.50	122,916.00	11,612.20	12,141.20	2,515.00	6,830.00	73,381.00						
District Type																					
Elementary	5	21.70%				61	28.20%				77	41.80%									
High	2	8.70%				25	11.60%				20	10.90%									
Unified	16	69.60%				130	60.20%				87	47.30%									
Locale																					
Rural	2	8.70%				13	6.00%				4	2.20%									
Town	4	17.40%				36	16.70%				13	7.10%									
Suburban	8	34.80%				108	50.00%				107	58.20%									
City	9	39.10%				59	27.30%				60	32.60%									
% Student Need	69.10	20.20	14.00	73.00	93.00	63.00	22.80	2.00	66.00	99.00	51.20	26.20	4.00	48.00	96.00						
% Student Poverty	65.70	21.10	8.00	71.00	92.00	59.80	23.40	2.00	63.00	98.00	47.30	26.60	3.00	42.50	95.00						
% English Learners	21.50	11.30	7.00	19.00	53.00	19.40	13.30	1.00	17.00	65.00	17.50	12.20	1.00	14.00	60.00						
% African American	8.20	7.10	0.20	7.30	25.70	4.20	5.50	0.02	2.10	37.60	3.00	3.40	0.07	1.70	1.72						
% Asian	8.70	13.20	0.10	3.60	58.00	7.20	12.00	0.00	2.80	72.40	12.30	13.80	0.10	8.10	64.70						
% Hispanic or Latino	59.90	22.10	9.30	59.60	97.90	56.80	25.20	5.30	56.20	98.30	48.20	26.90	3.97	46.00	99.10						
% White	14.70	9.80	1.00	13.70	40.50	23.80	19.00	0.20	19.10	77.70	27.50	20.90	0.40	22.80	75.10						
% Other Race or Ethnicity	8.50	5.20	0.80	8.80	19.40	8.00	5.80	0.10	6.80	38.20	9.00	5.40	0.00	8.80	30.80						

Similarly, district readiness follows somewhat unsurprising patterns according to racial and ethnic composition. Shares of students who are Asian are especially concentrated in districts with Strong Foundations to Improve Education. Conversely, these same districts on average serve smaller shares of students who are Hispanic or Latino than Few and Partial Foundations districts. Most stark are differences between shares of students who are African American and white, however: whereas a district with Few Foundations serves on average more than twice the share of African American students as a randomly selected DRI district, this same district teaches about 40% fewer white students. These average differences are less apparent for districts with Strong Foundations, suggesting the especially acute impacts of de facto segregation and concentrated disadvantage on school districts that serve the greatest share of historically marginalized students.

Even more concerning, the District Readiness Ratings follow unfortunately predictable patterns across student need, poverty, and language status. Those districts with Few Foundations enrolled the highest average share of high-needs students⁴ (69.1%), students living in poverty (65.7%), and English learners (21.5%). Although the average district with Partial Foundations comparatively enrolls slightly smaller shares of these student groups than districts with Few Foundations, the average Strong Foundations district enrolls a much smaller share of these student groups. The level of student poverty best captures these patterns: whereas more than 60% of students qualify for free or reduced price lunch in the average district with Partial Foundations or Few Foundations, less than one-half (47%) of students in the average district with Strong Foundations do. The latter's share of students is also smaller than the average DRI district's share of students in poverty.

Looking at these compositional breakdowns by Domain Rating generally reveals patterns consistent with District Readiness Ratings' patterns.⁵

- **Enrollment:** Districts with Few Foundations in Financial Management or Leadership & Governance on average serve more students than districts with Partial and Strong Foundations.
- **Race & Ethnicity:** Students who are African American are especially concentrated in districts with Few Foundations in Financial Management and School Personnel. Conversely,

⁴ California defines high-needs students as students who receive free or reduced price lunch, are English learners, or are foster youth. Students may fall into more than one of these categories, but for this measurement they are only counted once as high-needs students.

⁵ Tables available upon request.

students who are white or Asian account for especially large shares of the student body in districts with Strong Foundations in Family & Community Engagement and School Personnel.

- **Student Need:** Like with District Readiness Ratings, districts with Few or Partial Foundations in Family & Community Engagement and School Personnel enroll larger shares of high-need students than districts with Strong Foundations.
- **Student Poverty:** Because students in poverty account for a sizable portion of high-need students, patterns across Domain Ratings for student poverty follow those described above for shares of high-need students.
- **English Learners:** ELs are underrepresented in districts with Strong Foundations in School Personnel.

Taken together, the inaugural DRI release reveals that districts with greater shares of historically marginalized student groups generally have greater urgency to ready their systems to implement and sustain educational improvement and innovation. Instead of tinkering around education's edges with discontinuous and often contradictory policies and practices (Hess, 1998; Tyack & Cuban, 1995), district and school leaders who serve high-need populations would benefit from focusing on these important foundations for organizational success.

Finding #3: Despite some outliers, greater levels of district readiness are generally associated with higher ELA and math assessment performance.

To test the Domain and District Readiness Ratings' validity, we conducted a series of analyses examining the associations between the DRI's constructs and California's premiere summative assessments, Smarter Balanced test scores. Although the DRI's ratings draw from data in the 2019-20 and 2020-21 school years, we use Smarter Balanced test results from the most recent and highest quality assessments, the 2018-19 school year.⁶ The following results rely on correlational measures and should not be taken as demonstrating causal relationships; we expand on this in the report's conclusion.

⁶ During the 2019-20 school closures that began in March 2020, the California Department of Education waived the Smarter Balanced summative assessments for all school districts. The CDE also allowed districts to opt out of testing during the following school year. Less than one in four students completed the exams. Accordingly, state leaders and third-party analysts caution against using the available 2020-21 statewide scores (<https://www.cde.ca.gov/nr/ne/yr22/yr22rel03.asp>).

Figure 4

Distribution of District Readiness Ratings by Achievement Quartile

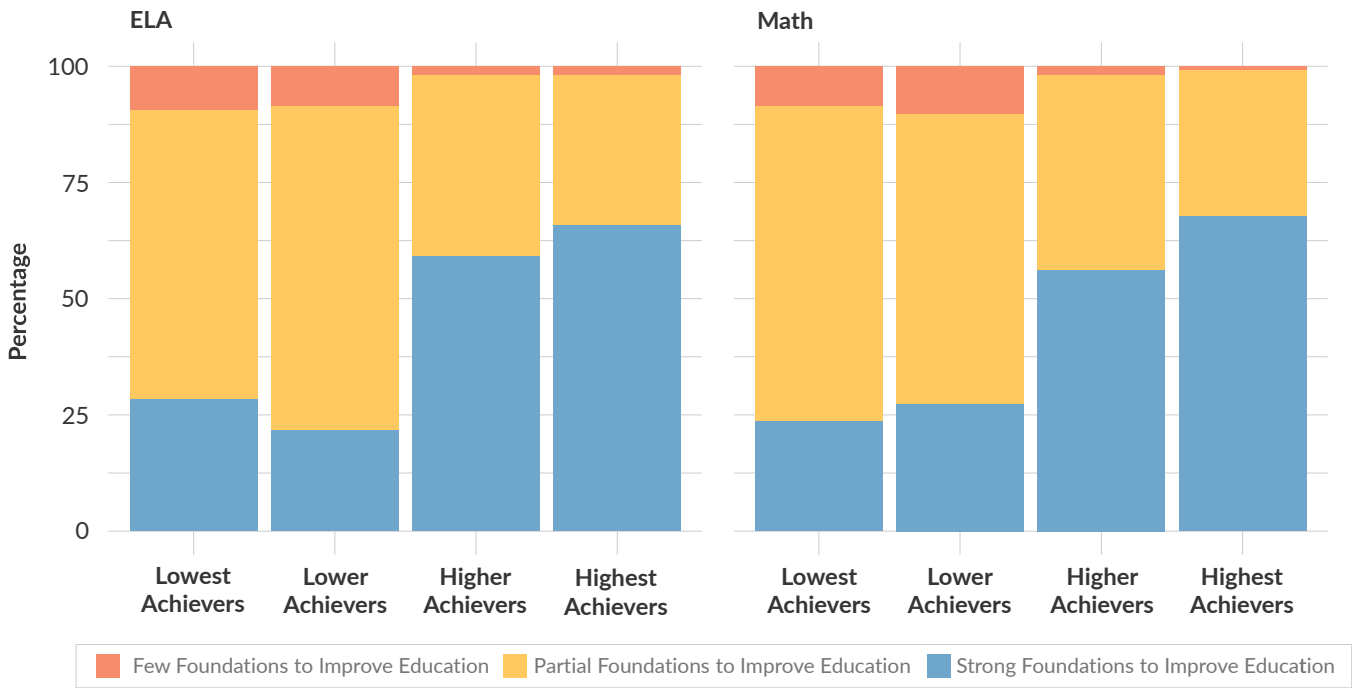
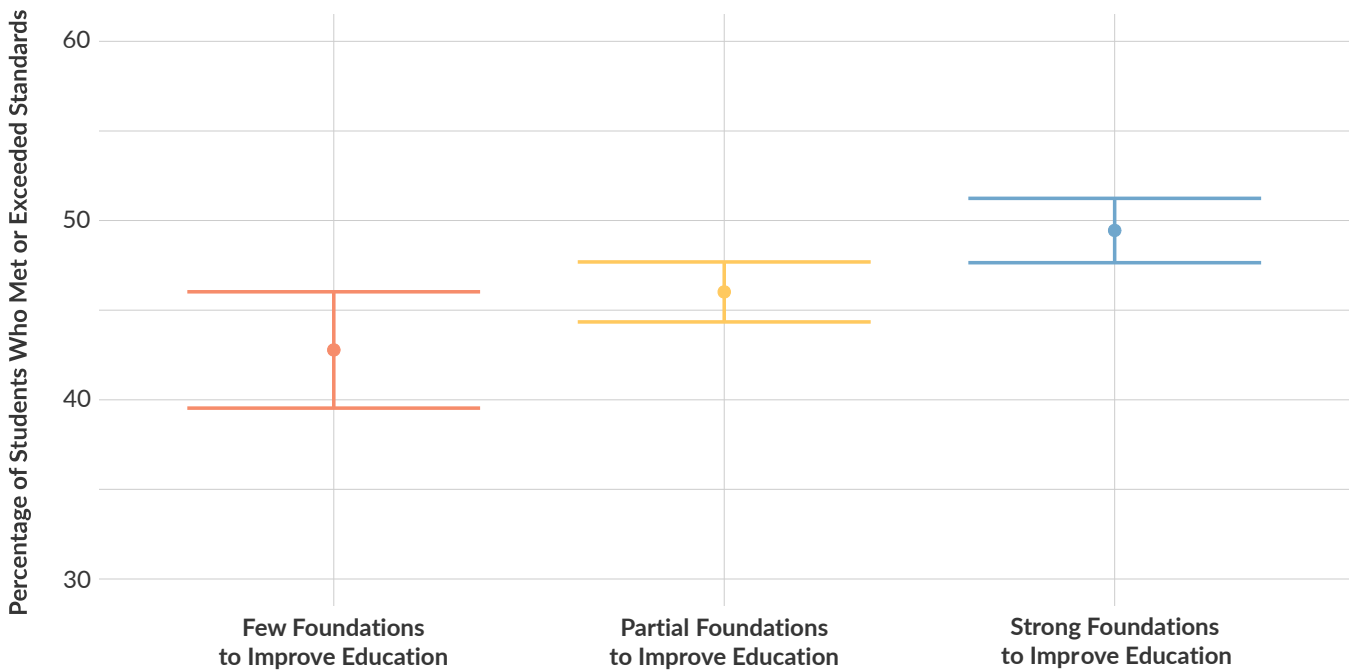


Figure 5

Distribution of District Readiness Ratings by Achievement Quartile



Predictions based on fully-fitted model using 2021-22 CA Smarter Balanced data and the following controls: district type, urbanicity, logged number of students, % student poverty, % African American, % Hispanic or Latino, % Asian, and % Other race or ethnicity.

Figure 4 displays the share of school districts by District Readiness Rating within the four quartiles of student English language arts (ELA) and math achievement.⁷ The share of districts with Strong Foundations grows over each higher achievement quartile. Across both subjects, the majority of districts in both the third (“Higher”) and fourth (“Highest”) achievement quartiles are rated with Strong Foundations. Related, the share of districts with Few Foundations shrinks from a high of about 10 districts in the lowest quartile to only two districts in the highest ELA quartile and one district in the highest Math quartile. Notably, nearly 30% and 25% of all districts in the lowest ELA and math achievement quartiles, respectively, have Strong Foundations to Improve Education. These surprising districts—districts with Few Foundations among the highest achievement quartile and Strong Foundations districts among the lowest achievement quartile—warrant further exploration in future research.

This descriptive bivariate relationship between District Readiness Ratings and student ELA achievement quartiles does not account for significant differences in student composition and district structural features between districts with Strong Foundations, Partial Foundations, and Few Foundations to improve education, though. It is therefore possible that these observed differences are due to confounding variables. To test whether these districts’ levels of readiness are independently and statistically significantly associated with student achievement, we use ordinary least squares regression to predict the share of students who Met or Exceeded Standards on the Smarter Balanced exams with several controls including district type, its locale’s level of urbanicity, share of socioeconomically disadvantaged students (percentage of students eligible for free or reduced price lunch), the logged number of students the district serves, its racial and ethnic composition, and the main independent variable of interest, District Readiness Rating.

Figure 5 depicts the predicted share and 95% confidence interval of students who Met or Exceeded ELA standards in the average urban unified school district with Few, Partial, or Strong Foundations to Improve Education. Districts with Strong Foundations to Improve Education are, on average, statistically expected to see greater shares of students to meet or exceed ELA standards compared to districts with Few or Partial Foundations ($p < 0.001$ each). Moreover, districts with Partial Foundations are expected to see slightly larger shares of students reach these levels relative to districts with Few Foundations ($p < 0.05$). These patterns generally hold for math achievement, though differences between districts with Few and Partial Foundations are not statistically significantly different (available upon request). Put simply, these results suggest that District Readiness Ratings explain an important piece of the differences in student outcomes between school districts.

⁷ Achievement is measured by the percentage of students who Met or Exceeded grade-level standards. These calculations use data across all grades tested by the district.

Finding #4: Even when holding important district demographic and structural features constant, conditions related to district readiness are associated with greater ELA and math outcomes.

In the final set of analyses, this report utilizes a series of ordinary least squares regression models to isolate the associations between the measured domain constructs and the shares of students who Met or Exceeded Standards on the 2021-22 Smarter Balanced ELA tests.⁸ All continuous variables were standardized such that a one standard deviation increase in the covariate above the variable's mean is associated with the displayed percentage point increase in the outcome variable. Similarly, categorical variables' coefficients should be interpreted as the expected percentage point increases in the outcome variable for the value taken by the category.

Model 1 presents the baseline model, or a model without any covariates. This model's constant can be interpreted as the average DRI district's share of students who met or exceeded state standards on the 2021-22 ELA Smarter Balanced test. On average, about 48.5% of students in any given DRI district scored at either of these levels. Model 2 adds important demographic and structural features that previous research highlights as importantly associated with district-level student outcomes (e.g., Podolsky et al., 2019). These results illustrate that for DRI districts the type of school district (elementary, unified, or high school), degree of urbanicity, share of students in poverty, number of enrolled students, and racial and ethnic composition account for 82% of the variation in ELA test scores ($R^2 = 0.820$).

The following five models individually add each Domain Rating Score to evaluate each organizational condition's unique explanatory contribution. Except for Leadership & Governance and Work Environment, each domain construct is significantly and positively associated with better student outcomes. Chi-square tests assessing the goodness-of-fit between each of these models and Model 2 (not shown here) similarly reveal each model that includes the domain construct explains more of the outcome than the model with only demographic and structural covariates.

Since the specifications of Models 3 through 7 are identical except for the included domain construct, the relative effect of each organizational condition can be compared to each other. Across the domains, School Personnel has the strongest association with ELA outcomes: a one-unit increase in the average district's Domain Rating Score is associated with a 2 percentage point

⁸ For space, we do not present the results from the math analyses. Their results are nearly identical to results from the analyses with ELA outcomes, save for two important differences we describe above. Math results are available upon request.

increase in the share of students who met or exceeded the state standards on the summative ELA assessment ($p < 0.01$). Research illustrates the importance of teachers and other immediate educators for student outcomes that these results confirm (Kini & Podolsky, 2016; Miller, 2013; Pitts, 2007).

Additionally, when we examine the concurrent effects of all organizational conditions while controlling for important demographic and structural features, we find that nearly all conditions are uniquely and significantly associated with positive ELA outcomes. That is, even when controlling for associations of important demographics and structural conditions, stronger foundations in nearly every organizational area are predicted to significantly improve ELA outcomes. We find nearly the same results for Math: stronger organizational conditions measured by the District Readiness Index are expected to be associated with better Math outcomes.

Important differences in ELA and math outcomes should be noted, however.

- Although stronger foundations in school district's Work Environments are not associated with better ELA outcomes, they are positively but weakly associated with better math outcomes ($p < 0.1$).
- Whereas stronger Financial Management foundations are significantly associated with better ELA outcomes ($p < 0.01$), they are not significantly associated with greater shares of students who met or exceeded math standards.

These findings open important conversations while offering inspiring answers about district readiness and student achievement. For example, further investigations should explore why and how financial management and work environment foundations are differentially associated with ELA and math outcomes. Moreover, varying levels in Leadership & Governance foundations are at worst negligibly associated with student achievement. Although these findings generally match patterns previously documented in the literature (e.g., Chingos et al., 2014), readers should keep in mind 1) the vast majority of school districts have Strong Foundations in this organizational condition (see Figure 2 above) and 2) it is significantly but weakly correlated with Work Environment (Table 1). Additional metrics that capture greater variation in school districts' leadership and governance practices and working conditions may reveal more information to further understand the relationships between these constructs and student achievement. Lastly, as prior research would predict, strong foundations in School Personnel and Family & Community Engagement are especially important for greater student achievement. In sum, across subjects, greater levels of district readiness appear to be generally associated with greater student achievement.

Table 4
Results for Correlates of Percentage of Students Met or Exceeded ELA Standards

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Type (ref: Unified)									
Elementary School District		0.33 (0.91)	-0.011 (0.89)	-0.01 (0.91)	0.32 (0.91)	0.61 (0.88)	0.33 (0.91)		0.02 (0.88)
High School District		7.22*** (1.22)	7.32*** (1.19)	6.91*** (1.21)	7.21*** (1.22)	6.97*** (1.18)	7.30*** (1.23)		6.87*** (1.17)
Locale (ref: City)									
Suburban		2.39*** (0.87)	2.04** (0.86)	2.46*** (0.87)	2.38*** (0.87)	1.94** (0.85)	2.40*** (0.87)		1.75** (0.84)
Town		-2.00 (1.50)	-1.86 (1.47)	-2.10 (1.49)	-2.00 (1.50)	-1.34 (1.46)	-2.00 (1.50)		-1.35 (1.43)
Rural		-6.72*** (1.91)	-7.01*** (1.88)	-6.97*** (1.90)	-6.71*** (1.92)	-4.77** (1.89)	-6.82*** (1.92)		-5.47*** (1.86)
# of Students (Logged)		0.33 (0.47)	0.38 (0.46)	0.32 (0.46)	0.34 (0.47)	0.31 (0.45)	0.33 (0.47)		0.31 (0.45)
Percent Socioeconomically Disadvantaged		-13.73*** (0.85)	-13.31*** (0.84)	-13.64*** (0.84)	-13.73*** (0.85)	-13.28*** (0.82)	-13.68*** (0.85)		-12.82*** (0.82)
% African American		-1.02** (0.43)	-0.99** (0.42)	-0.92** (0.43)	-1.02** (0.43)	-0.76* (0.42)	-1.00** (0.43)		-0.63 (0.42)
% Asian		4.44*** (0.45)	4.26*** (0.44)	4.40*** (0.44)	4.45*** (0.45)	4.40*** (0.43)	4.39*** (0.46)		4.14*** (0.44)
% Hispanic		1.38 (0.87)	1.26 (0.85)	1.36 (0.86)	1.38 (0.87)	1.66** (0.84)	1.30 (0.88)		1.43* (0.84)
% Other race or ethnicity		-1.51*** (0.51)	-1.29** (0.50)	-1.45*** (0.51)	-1.51*** (0.51)	-1.23** (0.50)	-1.48*** (0.51)		-0.96* (0.49)
Family & Community Engagement			1.51*** (0.37)						1.27*** (0.36)
Financial Management				0.99*** (0.37)					3.46*** (0.74)
Leadership & Governance					0.06 (0.38)				1.80*** (0.73)
School Personnel						2.04*** (0.39)			0.93*** (0.35)
Work Environment							0.22 (0.38)		0.23 (0.36)
Constant	48.48*** (0.83)	46.86*** (0.89)	47.15*** (0.88)	47.00*** (0.88)	46.87*** (0.89)	46.86*** (0.86)	46.85*** (0.89)	48.48*** (0.72)	47.20*** (0.85)
District Observations	422	422	422	422	422	422	422	422	422
R ²	0.00	0.82	0.83	0.82	0.82	0.83	0.82	0.26	0.84
Adjusted R ²	0.00	0.82	0.82	0.82	0.81	0.83	0.82	0.25	0.83
F Statistic		169.54*** 410	162.75*** 409	158.43*** 409	155.04*** 409	167.57*** 409	155.19*** 409	29.49*** 416	132.41*** 405

Note: * p < 0.1; ** p < 0.05; *** p < 0.01

Conclusion

This initial report outlined the background to, purpose of, and initial findings from the District Readiness Index’s inaugural data release. It concludes by detailing some important notes readers should consider when interpreting these insights.

Descriptive analyses treated district placement in a District Readiness or Domain Ratings category as reliable and valid. Although some rudimentary analyses offered some answers about the fidelity of these placements (i.e., what share of districts would change category if they gained or lost one Indicator point?), future research might aim to better understand what groups of districts share the same Readiness ratings across domains and/or the same “path” to readiness within their domain. If there are some organizational conditions that are especially important for *other* conditions, districts may even target their limited resources more efficiently. For example, if hiring and retaining long-term, representative, and highly qualified staff for schools—a robust set of School Personnel—is especially effective at minimizing conflicts between the district and its collective bargaining units—a Work Environment with Strong Foundations—districts would do well to target the former in order to strengthen the latter.

Like other facets of education, the COVID-19 pandemic affected data collection for this project. As discussed above, we began collecting data during the 2020-21 school year amidst distance learning. Analyses above leveraged the recently released 2021-22 CAASPP test results to evaluate student outcomes with cross-sectional DRI measures. Future waves of data on both outcomes and organizational conditions should seek to answer questions about the long-term associations that these longitudinal data could address.

Most analyses presented above are descriptive in nature, and correlational at best. Controlling for other important covariates increases confidence that the DRI’s Domain Ratings have important implications for district-level outcomes. More sophisticated causal analyses would strengthen the case for the DRI’s importance as a key lever for improving education. Moreover, analysts would do well to pair the quantitative analyses presented here with in-depth qualitative studies of “positive” and “negative outliers” (Burns et al., 2019)—districts that rank particularly high and low on the DRI but score exceptionally low or high in terms of student outcomes, respectively.

Despite these limitations, this report’s early insights indicate that most California school districts are ready to initiate and sustain innovative programs. They also offer evidence that strengthening these critical organizational conditions may help yield improved student outcomes. Specifically, we found that:

- Most California districts exhibit at least some, if not many, of the organizational conditions critical to implement and sustain educational improvement and innovation. Importantly, over 70 school districts exemplify district readiness across all organizational conditions.
- Across California, school districts with Few Foundations in overall readiness and the DRI's component organizational conditions 1) are more likely to be located in urban areas, 2) enroll more students, and 3) serve greater shares of historically marginalized students.
- Despite some outliers, greater levels of district readiness are generally associated with higher ELA and math standardized achievement test performance.
- Even when holding constant important district demographic and structural features, conditions related to district readiness are associated with greater ELA and math outcomes.

District readiness is a new term and framework for often-cited challenges to initiating and sustaining improvement and innovation in education. Our data indicates that, for educators to successfully teach students, districts and their communities must focus on and strengthen the foundational organizational conditions for improvement and innovation. The DRI presents a robust set of information for educators, community members, funders, and families to gauge these conditions. Stakeholders should find ways to leverage this information for sustainable improvement. Our students' futures count on it.

Appendix I: Exemplary School Districts

More than 70 exemplary school districts maintain Strong Foundations in all five of the District Readiness Index's Domain Ratings.

Alameda

- Castro Valley Unified
- New Haven Unified
- San Leandro Unified

Contra Costa

- Brentwood Union Elementary
- Kern
- Lamont Elementary

Los Angeles

- ABC Unified
- Arcadia Unified
- Beverly Hills Unified
- Claremont Unified
- Culver City Unified
- El Monte City
- El Monte Union High
- El Segundo Unified
- Glendale Unified
- Glendora Unified
- Hacienda la Puente Unified
- La Canada Unified
- Manhattan Beach Unified
- Redondo Beach Unified
- San Marino Unified
- Saugus Union
- Sulphur Springs Union
- Temple City Unified
- Walnut Valley Unified
- West Covina Unified

Marin

- Mill Valley Elementary
- San Rafael City High
- Tamalpais Union High

Orange

- Brea-Olinda Unified
- Capistrano Unified
- Centralia Elementary
- Fountain Valley Elementary
- Fullerton Elementary
- Fullerton Joint Union High
- Garden Grove Unified
- Huntington Beach City Elementary
- Huntington Beach Union High
- Irvine Unified
- La Habra City Elementary
- Laguna Beach Unified
- Magnolia Elementary
- Placentia-Yorba Linda Unified
- Westminster

Placer

- Eureka Union
- Tahoe-Truckee Unified

Riverside

- Corona-Norco Unified
- Jurupa Unified
- Val Verde Unified

San Bernardino

- Chaffey Joint Union High
- Morongo Unified
- Ontario-Montclair

- Redlands Unified
- Rialto Unified

San Diego

- Carlsbad Unified
- Chula Vista Elementary
- Coronado Unified
- Del Mar Union Elementary
- Encinitas Union Elementary
- Lemon Grove

San Luis Obispo

- Atascadero Unified

San Mateo

- Menlo Park City Elementary
- Sequoia Union High

Santa Clara

- Fremont Union High
- Los Gatos Union Elementary
- Mountain View-Los Altos Union High
- Palo Alto Unified
- Santa Clara Unified

Stanislaus

- Riverbank Unified

Ventura

- Oak Park Unified
- Oxnard
- Simi Valley Unified

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