Memorandum

State of California

HCAi Department of Health Care Access and Information

Date: June 25, 2020

To: California Healthcare Workforce Policy Commission

From: Caryn Rizell, Deputy Director
Department of Health Care Access and Information
Healthcare Workforce Development Division

Subject: Registered Nurse Shortage Areas Report

Summary

In 2007, the California Healthcare Workforce Policy Commission (Commission) adopted formal criteria for establishing Registered Nurse Shortage Areas (RNSA). During the June 2020 policy meeting, the Commission voted to revise the methodology using per-capita based calculations and a custom geographic unit of analysis. The Commission also voted to incorporate the degree of shortage into the RNSA designation, categorizing them as high, medium, or low severity areas. The Department of Health Care Access and Information (HCAI) updated the RNSA designations with the new methodology and the most recently available data. This update designates 58 of 72 custom areas in California as RNSAs, of which the Commission considers 19 to be high-severity, 19 to be medium-severity, and 20 to be low-severity.

HCAI provides a tool on its website (https://geo.hcai.ca.gov/hpsa-search) that allows stakeholders to lookup whether an address is in an RNSA.

Background and Methodology

The updated methodology calculates a ratio of employed RNs per 100,000 population. HCAI obtained the number of active RN licenses as of March 2020 from the Department of Consumer Affairs (DCA) licensee lists, employment estimates from regional RN employment estimates published by the Healthforce Center at the University of California San Francisco[1], and population counts from the 2018 American Community Survey 5-year estimates.

The Commission directed HCAI to designate RNSAs as areas with a ratio below the national 25th percentile. According to the 2018 National Sample Survey of Registered Nurses conducted by the Health Resources and Services Administration (HRSA) the national 25th percentile is 943 employed RNs per 100,000 population. The Commission further instructed HCAI to divide RNSAs into thirds based on the severity of the shortage.

To improve the ability to pinpoint specific areas of unmet need, the Commission also adopted a custom geography for RNSAs based on the Dartmouth Atlas of Healthcare methodology for hospital service areas. HCAI staff used California hospital patient-origin data from the California Health and Human Services Agency's Open Data Portal to identify the city where a plurality of residents from each census tract in California went to the hospital. Staff combined

---

[1] https://rnworkforce.ucsf.edu/content/regional-california-rn-supply-and-demand-forecasts

census tracts that went to the same city for hospital care, and combined cities that were within commute distance of each other to create the custom geographies. These geographies divide California into 72 custom areas, named after the two most populous census places within each boundary.

Results

The updated methodology designates 58 of 72 areas as RNSAs. Table 1 summarizes the designations by severity and population:

Table 1.

RNSA	Number of Areas	Population	Percent of California Population
No	14	9,857,409	25%
Yes - Low	20	19,799,189	51%
Yes - Medium	19	5,290,753	14%
Yes - High	19	4,201,409	11%

Table 2 lists every custom area and its designation status, sorted geographically from north to south:

Table 2.

Area ID	Area Name	Population	Employed RNs	Ratio	RNSA	Severity
1	Crescent City/Bertsch-Oceanview Area	27,424	178	649.1	Yes	Medium
2	Yreka/Montague Area	23,613	116	491.3	Yes	High
3	Mount Shasta/Weed Area	19,927	200	1,003.7	No	--
4	Burney/Alturas Area	18,100	80	442.0	Yes	High
5	Eureka/McKinleyville Area	136,614	1,166	853.5	Yes	Low
6	Redding/Red Bluff Area	246,814	2,292	928.6	Yes	Low
7	Susanville/Westwood Area	29,683	157	528.9	Yes	High
8	Chester/Hamilton Branch Area	3,835	31	808.3	Yes	Low
9	East Quincy/Quincy Area	9,579	67	699.4	Yes	Medium
10	Portola/Loyalton Area	8,215	56	681.7	Yes	Medium
11	Chico/Paradise Area	189,136	1,879	993.5	No	--
12	Ukiah/Willits Area	63,268	435	687.6	Yes	Medium
13	Fort Bragg/Caspar Area	19,989	129	645.4	Yes	Medium
14	Yuba City/Linda Area	229,197	1,463	638.3	Yes	Medium
15	Grass Valley/Alta Sierra Area	71,998	620	861.1	Yes	Low
16	Truckee/Kings Beach Area	26,931	333	1,236.5	No	--
17	Colusa/Williams Area	13,849	23	166.1	Yes	High
18	Clearlake/Hidden Valley Lake Area	64,148	355	553.4	Yes	High
19	Davis/Woodland Area	164,770	959	582.0	Yes	Medium
20	Diamond Springs/Placerville Area	66,997	688	1,026.9	No	--
21	South Lake Tahoe/Mesa Vista Area	31,295	269	859.6	Yes	Low
22	Sacramento/Elk Grove Area	2,044,079	22,079	1,080.1	No	--

Table 2.

Area ID	Area Name	Population	Employed RNs	Ratio	RNSA	Severity
23	Santa Rosa/Napa Area	885,057	8,960	1,012.4	No	--
24	Rancho Calaveras/Jackson Area	65,129	465	714.0	Yes	Medium
25	Fairfield/Vacaville Area	287,516	3,822	1,329.3	No	--
26	Sonora/Copperopolis Area	74,694	762	1,020.2	No	--
27	Antioch/Brentwood Area	235,150	2,616	1,112.5	No	--
28	Stockton/Tracy Area	720,080	5,462	758.5	Yes	Medium
29	Mammoth Lakes/Chalfant Area	14,174	116	818.4	Yes	Low
30	Concord/Vallejo Area	1,056,413	12,108	1,146.1	No	--
31	Oakland/Hayward Area	1,657,648	13,318	803.4	Yes	Low
32	Modesto/Turlock Area	596,568	4,643	778.3	Yes	Low
33	Midpines/Mariposa Area	14,713	99	672.9	Yes	Medium
34	San Jose/San Francisco Area	3,499,310	27,509	786.1	Yes	Low
35	Merced/Atwater Area	164,561	896	544.5	Yes	High
36	Santa Cruz/Live Oak Area	190,786	2,241	1,174.6	No	--
37	Los Banos/Gustine Area	62,069	159	256.2	Yes	High
38	Fresno/Clovis Area	985,299	8,854	898.6	Yes	Low
39	Watsonville/Interlaken Area	98,649	468	474.4	Yes	High
40	Gilroy/Hollister Area	121,863	941	772.2	Yes	Low
41	Reedley/Dinuba Area	100,663	337	334.8	Yes	High
42	Bishop/Dixon Lane-Meadow Creek Area	18,085	165	912.4	Yes	Low
43	Seaside/Monterey Area	135,800	1,213	893.2	Yes	Low
44	Visalia/Tulare Area	279,890	2,322	829.6	Yes	Low
45	Salinas/Prunedale Area	273,575	1,292	472.3	Yes	High
46	Hanford/Lemoore Area	242,382	1,198	494.3	Yes	High
47	Porterville/Lindsay Area	112,559	565	502.0	Yes	High
48	Delano/McFarland Area	92,273	219	237.3	Yes	High
49	Paso Robles/Atascadero Area	102,308	1,004	981.4	No	--
50	Lake Isabella/Weldon Area	14,969	83	554.5	Yes	High
51	Ridgecrest/China Lake Acres Area	37,074	162	437.0	Yes	High
52	Bakersfield/Oildale Area	717,249	4,887	681.4	Yes	Medium
53	Victorville/Hesperia Area	434,460	2,482	571.3	Yes	Medium
54	Santa Maria/San Luis Obispo Area	334,532	2,375	709.9	Yes	Medium
55	Palmdale/Lancaster Area	432,757	2,791	644.9	Yes	Medium
56	Lompoc/Vandenberg Village Area	82,574	466	564.3	Yes	Medium
57	Santa Barbara/Goleta Area	210,368	1,464	695.9	Yes	Medium
58	Needles/Big River Area	6,737	22	326.6	Yes	High
59	Santa Clarita/Glendale Area	2,334,766	22,354	957.4	No	--
60	Oxnard/Thousand Oaks Area	874,206	7,797	891.9	Yes	Low
61	Twentynine Palms/Yucca Valley Area	99,522	679	682.3	Yes	Medium
62	Pomona/Pasadena Area	1,836,611	14,918	812.3	Yes	Low
63	Los Angeles/East Los Angeles Area	2,654,094	11,511	433.7	Yes	High

Table 2.

Area ID	Area Name	Population	Employed RNs	Ratio	RNSA	Severity
64	Downey/Norwalk Area	1,200,879	7,030	585.4	Yes	Medium
65	Long Beach/Torrance Area	1,576,476	13,087	830.1	Yes	Low
66	Riverside/Fontana Area	3,500,300	31,738	906.7	Yes	Low
67	Blythe/Mesa Verde Area	22,833	88	385.4	Yes	High
68	Anaheim/Santa Ana Area	3,253,219	28,759	884.0	Yes	Low
69	Oceanside/Escondido Area	959,184	8,177	852.5	Yes	Low
70	Indio/Cathedral City Area	456,048	2,933	643.1	Yes	Medium
71	El Centro/Calexico Area	169,578	927	546.7	Yes	High
72	San Diego/Chula Vista Area	2,343,649	22,348	953.6	No	--

Registered Nurse Shortage Areas

Legend:
- No Shortage (blue)
- Yes - High (dark red)
- Yes - Medium (orange)
- Yes - Low (light tan)
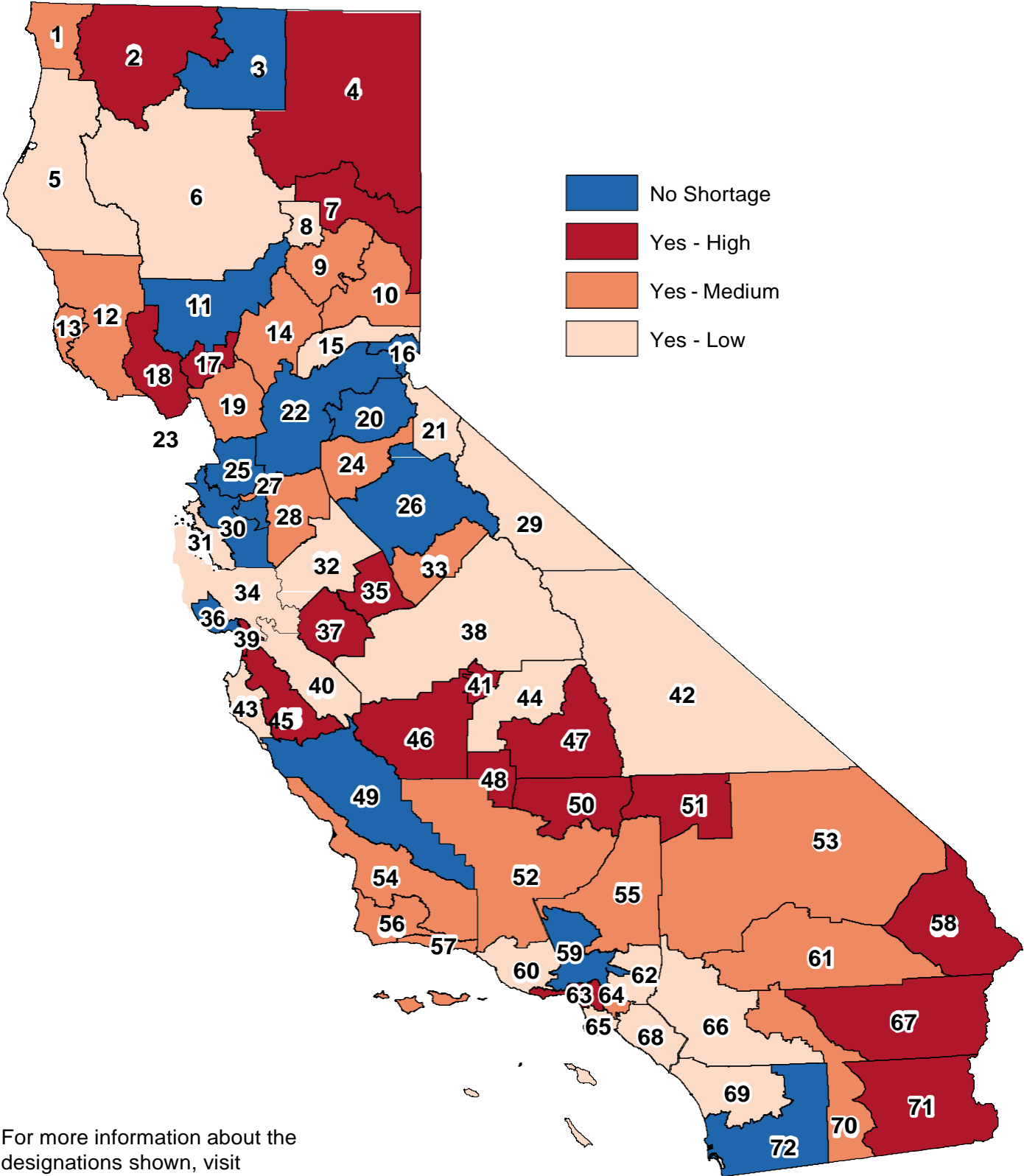
For more information about the designations shown, visit
https://oshpd.ca.gov/loans-scholarships-grants/grants/song-brown/

0   50   100 Miles

June 2020