

FORECASTING DURING THE COVID-19 CRISES



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Those of us forecasting in the current economic environment face several unusual challenges. First, we have no experience with a situation

where a significant part of the economy has been shutdown by government direction. We have no parallel situation of how various sectors will occur going forward with the likely slow introduction of a vaccine in 2021. There is also no consensus of whether or when a new Covid-19 stimulus package will emerge from negotiation between the President and the two branches of Congress.

Given this situation, you may wonder how the forecast shown in the employment sector of this report was developed. First, we do have a substantial amount of information on the speed with which various sectors recovered during 2011-2019 after the Great Recession. This varied from 7.31% a year for logistics and 6.58% compounded for construction. Health care grew at a strong 3.92% per year. These sectors were expected to slowdown from those rates in 2021. Tariff issues will likely continue to plague logistics which was forecasted at 5.0%. Construction was slowed to 3.0% because its 2011-2019 rate was extraordinarily strong given the depth its employment reached in the Great Recession. Health care was slowed to 3.0% given people's fear of close one-on-one contact.

Other than those shifts, the balance of the economy, with the exception of the four sector hit extremely hard by the pandemic, were forecasted for 2021 at their compound annual rates from 2011-2019. These varied from a high of 5.0% for social assistance to a low of 0.4% for tax starved local governments.

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QUARTERLY ECONOMIC REPORT

RIVERSIDE & SAN BERNARDINO COUNTIES, CALIFORNIA

YEAR 32

OCTOBER 2020

INLAND EMPIRE CITY PROFILE 2020

John E. Husing, Ph.D.

What does the most recent comparable data say about the 52 cities of the Inland Empire? The annual City Profile (*Exhibits 1 & 2*) provides information to answer this question. The sources are the most recently available data for population, taxable sales, assessed valuation, poverty, housing prices and volumes, income and jobs/housing balance.

Population. From 2010-2020, the CA Finance Department reports that the Inland Empire added 397,990 people to reach 4,622,841 (9.4%). The gain represented 15.7% of California's population growth of 2,528,884. The area continues to exceed the populations of 25 U.S. states. From 2019 to 2020, the area added 31,731 people (0.7%). In 2020, twelve cities have over 100,000 people led by Riverside (328,155) and San Bernardino (217,946) followed by Fontana (213,000) and Moreno Valley (208,838). The smallest cities were Indian Wells (5,403), Needles (5,248) and Big Bear Lake (5,206). Six cities added over 15,000 people from 2010-2020: Riverside (24,284), Menifee (19,574), Ontario (18,947), Fontana (16,931), Corona (15,874), Moreno Valley (15,473). Five cities added under 500 people: Indian Wells (445), Canyon Lake (439), Needles (404), Grand Terrace (386), Big Bear Lake (187). One city shrank: Blythe (-1,562).

Of California's 482 cities in 2020, five Inland Empire places had top 25 populations: Riverside (12th), San Bernardino (19th), Fontana (20th), Moreno Valley (21nd) and Ontario (25th). The housing slowdown continued reducing population growth from 2019-2020. Still, the area had five of the state's 20 fastest growth rates: Calimesa (5.7%; 2nd), Norco (4.3%; 5th), Beaumont (3.7%; 9th), Twentynine Palms (2.7%, 14th) and Menifee (2.5%, 18th). Five inland cities ranked in the top 20 in absolute growth: Ontario (2,377; 11th), Menifee (2,361; 12th), Beaumont (1,845; 16th), Victorville (1,790; 17th) and Riverside (1,728; 19th) [not shown].

Taxable Retail Sales. Taxable sales are a major revenue source for cities. Its growth is under pressure due to the public's increasing use of e-commerce. The CA Department of Tax and Fee Administration now reports the data quarterly, a few months after they occur. In calendar year 2019, San Bernardino County's sales rose 2.9% to \$41.8 billion. Riverside County's sales increased 4.0% to \$40.5 billion (*Exhibit 1*). The combined Inland

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1 INLAND EMPIRE CITY PROFILE																		
City	Population				Taxable Retail Sales				Assessed Valuation				Poverty					
	2020	Rank	2010-2020 Change	Rank	2019 (mil)	Rank	% Chg.	Per Capita	Rank	July 1, 2020 (mil)	Rank	% Chg.	Per Capita	Rank	All People 2018	Rank	Under 18 2018	Rank
SAN BERNARDINO COUNTY																		
Adelanto	35,663	37	3,898	31	\$177	43	10.2%	\$5,251	48	\$2,491	40	8.4%	\$73,775	43	35.4%	51	47.3%	51
Apple Valley	74,394	21	5,259	25	\$604	33	2.5%	\$8,119	40	\$6,595	27	5.9%	\$88,648	34	11.6%	23	16.8%	26
Barstow	24,268	43	1,629	41	\$620	32	-5.5%	\$25,538	12	\$1,490	47	3.2%	\$61,393	49	36.6%	52	51.3%	52
Big Bear Lake	5,206	52	187	51	\$227	42	4.9%	\$43,565	2	\$3,818	35	3.9%	\$733,351	2	17.1%	35	29.6%	41
Chino	89,109	16	11,126	15	\$2,498	8	-1.8%	\$29,946	6	\$15,061	10	5.5%	\$180,578	7	6.7%	6	6.2%	7
Chino Hills	82,409	18	7,610	19	\$715	30	-0.9%	\$8,680	38	\$13,503	14	4.7%	\$163,854	10	3.6%	1	2.9%	3
Colton	54,118	27	1,964	39	\$897	22	3.9%	\$16,570	21	\$3,985	33	6.7%	\$73,637	44	15.8%	33	22.2%	33
Fontana	213,000	3	16,931	4	\$3,713	4	9.0%	\$17,434	18	\$22,355	5	6.4%	\$104,951	24	11.4%	20	15.3%	21
G. Terrace	12,426	47	386	50	\$71	50	7.4%	\$5,718	45	\$1,194	48	4.3%	\$96,052	30	8.9%	14	14.5%	19
Hesperia	96,393	14	6,220	23	\$890	23	3.0%	\$9,235	34	\$6,809	26	6.6%	\$70,634	46	14.1%	32	16.7%	25
Highland	55,323	26	2,219	37	\$265	40	5.9%	\$4,798	49	\$3,957	34	4.1%	\$71,531	45	20.0%	42	27.7%	40
Loma Linda	24,535	42	1,274	45	\$767	29	1.0%	\$31,262	4	\$2,413	41	3.8%	\$98,331	29	17.9%	37	20.3%	31
Montclair	39,490	35	2,826	35	\$1,206	18	-1.2%	\$30,537	5	\$3,668	38	4.8%	\$92,893	33	17.0%	34	25.4%	37
Needles	5,248	51	404	49	\$45	51	14.0%	\$8,600	39	\$398	52	11.8%	\$75,773	41	27.7%	48	44.9%	50
Ontario	182,871	5	18,947	3	\$8,186	1	3.1%	\$44,765	1	\$29,483	2	7.4%	\$161,225	12	11.8%	24	17.2%	28
R. Cucamonga	175,522	6	10,253	17	\$2,756	7	-1.1%	\$15,959	23	\$28,757	3	4.6%	\$166,512	9	7.5%	10	5.7%	4
Redlands	70,952	22	2,205	38	\$1,202	19	3.4%	\$16,935	19	\$10,225	20	5.3%	\$144,119	15	7.4%	9	2.7%	2
Rialto	104,553	12	5,382	24	\$1,880	11	6.9%	\$17,983	16	\$10,761	18	8.1%	\$103,365	25	13.5%	31	20.9%	32
San Bernardino	217,946	2	8,022	18	\$3,336	5	2.8%	\$15,778	24	\$16,296	8	5.6%	\$77,076	40	20.3%	43	30.6%	44
29 Palms	29,258	40	4,210	30	\$113	48	-0.9%	\$3,870	51	\$955	50	4.4%	\$32,650	52	23.5%	47	29.7%	42
Upland	78,814	20	5,082	26	\$1,232	17	-0.9%	\$15,637	25	\$10,307	19	5.6%	\$130,781	17	7.3%	8	7.9%	9
Victorville	126,432	8	10,529	16	\$2,045	10	4.2%	\$16,731	20	\$9,737	21	6.3%	\$79,643	39	19.5%	40	27.3%	39
Yucaipa	55,712	25	4,345	29	\$349	36	0.2%	\$6,259	44	\$4,879	32	4.5%	\$87,567	35	12.3%	28	13.6%	18
Yucca Valley	22,236	44	1,536	42	\$328	38	1.9%	\$14,738	26	\$1,866	46	5.1%	\$83,938	37	19.9%	41	26.5%	38
SB County	2,180,537		145,327		\$41,769		2.9%	\$19,343		\$247,964		5.7%	\$114,852		13.3%		18.4%	
RIVERSIDE COUNTY																		
Banning	31,125	38	1,522	43	\$240	41	-4.6%	\$8,077	41	\$2,405	42	4.3%	\$80,829	38	23.2%	45	36.4%	47
Beaumont	51,475	30	14,598	8	\$475	35	4.2%	\$9,229	35	\$5,972	30	14.2%	\$116,014	20	10.4%	16	10.1%	13
Blythe	19,255	45	(1,562)	52	\$142	46	3.1%	\$10,557	33	\$776	51	3.2%	\$57,642	50	28.4%	49	42.2%	49
Calimesa	9,329	49	1,450	44	\$85	49	5.1%	\$9,061	36	\$1,108	49	15.3%	\$118,776	19	11.3%	18	10.7%	15
Canyon Lake	11,000	48	439	48	\$37	52	12.7%	\$3,344	52	\$1,930	45	4.0%	\$175,419	8	5.0%	2	5.7%	5
Cathedral City	53,580	28	2,380	36	\$863	26	2.0%	\$16,106	22	\$5,018	31	5.9%	\$93,652	32	20.7%	44	30.1%	43
Coachella	47,186	33	6,482	22	\$335	37	2.2%	\$7,095	43	\$2,091	43	6.1%	\$44,308	51	23.4%	46	34.0%	46
Corona	168,248	7	15,874	5	\$3,842	3	-0.4%	\$22,837	13	\$22,954	4	5.6%	\$136,427	16	8.7%	13	12.1%	16
Dsrt Hot Spr.	29,660	39	3,722	32	\$163	45	6.1%	\$5,495	47	\$2,061	44	9.1%	\$69,476	47	33.5%	50	40.7%	48
Eastvale	66,413	23	14,413	9	\$838	27	6.4%	\$12,611	30	\$10,845	17	4.8%	\$163,292	11	6.4%	4	6.0%	6
Hemet	85,175	17	6,518	21	\$1,124	20	7.0%	\$13,200	29	\$6,383	28	4.7%	\$74,936	42	19.1%	39	23.2%	35
Indian Wells	5,403	50	445	47	\$114	47	3.3%	\$21,145	15	\$6,353	29	3.5%	\$1,175,765	1	6.8%	7	0.0%	1
Indio	90,751	15	14,715	7	\$1,082	21	3.8%	\$12,042	31	\$9,187	23	5.0%	\$102,272	26	11.3%	19	16.8%	27
Jurupa Valley	107,083	11	12,083	11	\$1,260	16	13.5%	\$11,762	32	\$11,366	15	8.4%	\$106,145	23	12.1%	27	16.4%	24
Lk Elsinore	63,453	24	11,632	14	\$871	25	-0.1%	\$13,734	28	\$6,923	25	5.6%	\$109,100	22	8.1%	12	8.9%	12
La Quinta	40,660	34	3,193	33	\$874	24	6.0%	\$21,491	14	\$14,365	13	2.7%	\$353,293	4	10.8%	17	15.7%	23
Menifee	97,093	13	19,574	2	\$776	28	4.4%	\$7,988	42	\$11,168	16	8.6%	\$115,025	21	9.3%	15	10.4%	14
Moreno Vly.	208,838	4	15,473	6	\$1,851	12	3.6%	\$8,865	37	\$18,212	6	7.1%	\$87,208	36	12.0%	25	15.6%	22
Murrieta	115,561	9	12,095	10	\$1,629	14	3.0%	\$14,100	27	\$14,596	11	4.8%	\$126,307	18	6.3%	3	7.7%	8
Norco	27,564	41	501	46	\$656	31	4.3%	\$26,165	11	\$3,678	37	5.1%	\$146,734	14	7.6%	11	8.3%	11
Palm Desert	52,986	29	4,541	28	\$1,801	13	2.8%	\$33,993	3	\$16,153	9	3.5%	\$304,848	5	13.3%	30	19.6%	30
Palm Springs	47,427	32	2,875	34	\$1,321	15	5.6%	\$27,863	9	\$14,408	12	5.2%	\$303,789	6	17.3%	36	30.7%	45
Perris	80,201	19	11,815	13	\$2,104	9	15.4%	\$26,238	10	\$7,526	24	10.4%	\$93,835	31	13.2%	29	18.3%	29
Rancho Mirage	19,114	46	1,896	40	\$553	34	5.7%	\$28,910	8	\$9,278	22	3.7%	\$485,398	3	12.0%	26	22.5%	34
Riverside	328,155	1	24,284	1	\$5,786	2	0.1%	\$17,632	17	\$33,342	1	5.7%	\$101,833	27	11.5%	21	12.5%	17
San Jacinto	51,028	31	6,829	20	\$284	39	2.4%	\$5,564	46	\$3,440	39	6.4%	\$67,415	48	18.2%	38	24.0%	36
Temecula	111,970	10	11,873	12	\$3,318	6	1.6%	\$29,633	7	\$17,386	7	4.3%	\$155,273	13	6.6%	5	7.9%	10
Wildomar	37,183	36	5,007	27	\$176	44	-0.8%	\$4,744	50	\$3,713	36	4.4%	\$99,958	28	11.6%	22	14.8%	20
Riv County	2,442,304		252,663		\$40,538		4.0%	\$16,671		\$310,647		5.9%	\$127,788		11.3%		14.0%	
Inl. Empire	4,622,841		397,990		\$82,306		3.4%	\$17,927		\$558,610		5.8%	\$121,704		12.2%		16.1%	

Source: CA Finance Dept., E-5 Population Report; CA Bd. of Equalization, Taxable Retail Sales; San Bernardino/Riverside Co. Assessors, American Community Survey

2 INLAND EMPIRE CITY PROFILE

City	EXISTING HOMES						NEW HOMES						INCOME				Jobs\ HH
	2019 Volume	2018-19 Rank	2018-19 %Chg	2020 3rd Q Median P	2019-20 Rank	2019-20 %Chg	2019 Volume	2018-19 Rank	2018-19 %Chg	2020 3rd Q Median P	2019-20 Rank	2019-20 %Chg	2018 Median	2018 Rank	2018 (mil.)	2018 Rank	
SAN BERNARDINO COUNTY																	
Adelanto	81	41	-30.2%	\$259,000	46	12.6%	12	29	500.0%	\$301,500	46	-0.1%	\$40,018	47	\$391	47	0.74
Apple Valley	304	12	-14.4%	\$295,579	42	9.5%	13	26	62.5%	\$439,333	26	47.7%	\$51,314	35	\$1,725	24	0.59
Barstow	100	40	-3.8%	\$155,000	49	12.3%	0	45	0.0%	\$245,500	49	NA	\$39,585	49	\$448	45	0.98
Big Bear Lake	105	38	-21.6%	\$466,000	21	29.8%	2	39	NA	\$597,000	10	27.7%	\$51,014	36	\$167	51	1.74
Chino	115	37	-19.6%	\$556,379	11	7.9%	57	12	-25.0%	\$548,800	14	9.7%	\$87,090	9	\$2,527	15	2.15
Chino Hills	148	28	-3.3%	\$704,500	3	4.4%	7	33	-53.3%	\$854,250	3	-30.9%	\$103,473	3	\$3,580	10	0.61
Colton	73	43	-30.5%	\$355,000	37	11.5%	10	30	233.3%	\$423,000	30	9.7%	\$50,063	40	\$1,021	33	1.36
Fontana	401	5	-7.8%	\$470,082	19	9.4%	109	7	91.2%	\$517,790	19	2.1%	\$80,800	12	\$5,241	4	1.21
G. Terrace	24	52	-20.0%	\$420,000	24	13.5%	1	41	0.0%	\$507,500	21	21.1%	\$66,912	25	\$352	48	0.51
Hesperia	282	14	-20.8%	\$293,786	44	6.2%	24	21	9.1%	\$384,135	38	-0.0%	\$50,271	39	\$1,735	23	0.53
Highland	125	32	-3.1%	\$396,500	28	8.6%	5	36	-50.0%	\$496,000	22	10.5%	\$59,395	30	\$1,310	29	0.79
Loma Linda	40	47	17.6%	\$461,400	22	24.7%	0	45	0.0%	\$629,500	6	-21.8%	\$53,371	33	\$653	39	2.27
Montclair	31	49	-40.4%	\$480,000	18	9.1%	0	45	-100.0%	\$760,000	4	49.0%	\$58,012	31	\$703	37	1.29
Needles	25	51	56.3%	\$126,500	52	48.8%	1	41	0.0%	\$170,000	50	150.0%	\$31,843	52	\$95	52	0.61
Ontario	198	21	-25.0%	\$483,889	16	9.5%	180	2	16.1%	\$545,120	15	8.3%	\$75,266	18	\$4,351	5	2.46
R. Cucamonga	201	19	-4.3%	\$467,291	20	-0.1%	8	32	33.3%	\$618,074	9	6.7%	\$92,773	8	\$6,556	2	1.37
Redlands	157	26	-22.3%	\$408,462	26	10.0%	16	24	1500.0%	\$433,500	27	4.4%	\$72,410	21	\$2,726	13	1.64
Rialto	315	11	-1.3%	\$631,319	5	9.8%	50	14	11.1%	\$532,855	17	3.5%	\$70,188	24	\$2,076	19	0.88
San Bernardino	630	2	-8.3%	\$353,795	38	12.9%	55	13	-3.5%	\$393,364	36	-4.3%	\$49,721	41	\$4,015	7	1.78
29 Palms	119	34	26.6%	\$150,000	50	7.1%	0	45	0.0%	\$120,000	51	-40.0%	\$41,668	45	\$453	44	0.58
Upland	135	30	-12.3%	\$613,547	6	3.7%	25	20	-10.7%	\$574,750	11	3.7%	\$82,426	11	\$2,827	12	1.08
Victorville	408	4	-15.9%	\$293,851	43	13.0%	66	10	46.7%	\$347,813	43	5.8%	\$60,391	29	\$2,089	18	0.88
Yucaipa	141	29	-0.7%	\$405,000	27	6.6%	1	41	0.0%	\$430,000	29	10.3%	\$63,657	28	\$1,504	28	0.45
Yucca Valley	123	33	-14.6%	\$247,500	48	20.4%	5	36	25.0%	\$349,000	41	7.4%	\$45,277	43	\$555	41	0.54
SB County	24,849		-0.4%	\$369,500		10.8%	3,080		-0.4%	\$506,000		6.1%	\$67,903		\$55,665		1.21
RIVERSIDE COUNTY																	
Banning	117	35	-9.3%	\$279,000	45	7.3%	0	45	0.0%	\$310,500	44	-4.5%	\$41,038	46	\$584	40	0.58
Beaumont	160	24	-7.5%	\$375,000	34	7.9%	135	3	31.1%	\$417,500	32	12.8%	\$78,111	14	\$1,206	31	0.48
Blythe	26	50	-21.2%	\$140,000	51	-13.7%	0	45	-100.0%	\$75,000	52	NA	\$43,141	44	\$308	49	1.28
Calimesa	33	48	50.0%	\$375,000	33	-1.3%	37	19	208.3%	\$414,750	33	6.6%	\$53,366	34	\$229	50	0.35
Canyon Lake	79	42	-8.1%	\$482,500	17	7.5%	0	45	-100.0%	\$349,000	42	0.0%	\$97,237	5	\$486	43	0.33
Cathedral City	134	31	-11.3%	\$383,250	32	15.2%	13	26	-7.1%	\$353,500	40	-25.1%	\$46,370	42	\$1,263	30	0.58
Coachella	54	46	20.0%	\$296,500	41	13.2%	0	45	0.0%	\$302,000	45	-8.5%	\$33,870	51	\$662	38	0.92
Corona	530	3	-9.7%	\$586,314	9	10.8%	115	6	36.9%	\$527,685	18	1.1%	\$86,790	10	\$5,448	3	1.80
Desert Hot Spr.	158	25	0.0%	\$256,960	47	11.1%	2	39	NA	\$299,000	47	6.8%	\$34,814	50	\$432	46	0.43
Eastvale	181	23	-25.8%	\$606,833	7	8.7%	70	9	48.9%	\$508,290	20	-3.7%	\$114,230	1	\$1,878	21	0.37
Hemet	372	7	-7.0%	\$300,568	40	11.3%	22	23	46.7%	\$286,333	48	-5.0%	\$39,653	48	\$1,567	27	0.68
Indian Wells	56	45	86.7%	\$852,000	1	10.3%	6	35	50.0%	\$895,000	2	-7.5%	\$104,522	2	\$523	42	1.41
Indio	276	15	-17.6%	\$361,159	35	8.2%	41	18	-30.5%	\$412,318	34	-0.3%	\$74,774	19	\$2,995	11	0.69
Jurupa Valley	117	36	-22.0%	\$445,000	23	7.2%	7	33	-12.5%	\$539,500	16	29.1%	\$76,090	17	\$2,237	16	1.38
Lk Elsinore	201	20	-16.6%	\$417,308	25	10.2%	49	15	4.3%	\$421,818	31	1.1%	\$77,090	15	\$1,721	25	0.75
La Quinta	292	13	11.9%	\$562,500	10	23.6%	12	28	0.0%	\$933,000	1	42.9%	\$79,889	13	\$1,836	22	0.92
Menifee	353	10	-13.7%	\$395,035	29	12.5%	242	1	48.5%	\$445,086	25	5.2%	\$77,033	16	\$2,707	14	0.39
Moreno Vly.	394	6	-14.2%	\$386,624	30	10.6%	108	8	68.8%	\$432,085	28	15.0%	\$65,449	27	\$4,116	6	0.84
Murrieta	366	8	-19.0%	\$487,534	14	8.4%	130	4	17.1%	\$474,051	23	6.1%	\$100,080	4	\$3,924	9	0.92
Norco	56	44	-24.3%	\$605,000	8	6.2%	1	41	0.0%	\$567,000	12	56.0%	\$95,441	7	\$824	35	2.29
Palm Desert	253	16	15.5%	\$484,324	15	13.8%	9	31	0.0%	\$621,938	8	35.8%	\$57,578	32	\$2,125	17	1.32
Palm Springs	243	17	13.0%	\$691,272	4	10.3%	16	24	6.7%	\$689,031	5	-20.0%	\$50,361	38	\$1,940	20	1.16
Perris	187	22	-17.6%	\$383,478	31	14.0%	42	17	100.0%	\$393,000	37	-3.1%	\$66,545	26	\$1,582	26	1.35
Rancho Mirage	101	39	24.7%	\$732,500	2	12.0%	24	21	4.3%	\$561,614	13	2.4%	\$71,227	23	\$1,130	32	1.68
Riverside	650	1	-15.1%	\$517,487	13	19.8%	117	5	62.5%	\$625,303	7	10.5%	\$71,967	22	\$7,815	1	1.67
San Jacinto	148	27	-8.1%	\$326,828	39	9.7%	58	11	28.9%	\$361,565	39	9.3%	\$50,483	37	\$812	36	0.56
Temecula	361	9	-7.7%	\$532,807	12	7.8%	44	16	46.7%	\$469,333	24	-24.4%	\$95,918	6	\$3,992	8	1.56
Wildomar	218	18	-4.0%	\$358,071	36	13.3%	5	36	-37.5%	\$409,125	35	18.9%	\$73,282	20	\$878	34	0.49
Riv County	30,630		1.2%	\$452,000		13.0%	5,997		11.4%	\$445,500		2.4%	\$73,260		\$70,235		1.03
Inl. Empire	55,479		0.5%	\$414,200		11.9%	9,077		3.0%	\$470,600		4.9%	\$70,757		\$125,899		1.11

Source: Dataquick, U.S. Census Bureau, Economics & Politics, Inc.

Empire growth (3.4%) was just below that of California (3.7%). The Covid-19 impact during first and second quarter 2020 showed San Bernardino County's sales rose by 1.1% but then fell by -7.8%. Riverside County's sales rose by 1.3% but then declined by -6.5%. California's rates were respectively -0.2% and -17.5% (*not shown*).

In 2019, retail sales were again led by Ontario (\$8.19 billion) and Riverside (\$5.79 billion), followed by Corona (\$3.84 billion), Fontana (\$3.71 billion) and San Bernardino (\$3.34 billion). Temecula (\$3.32 billion) ranked sixth followed by Rancho Cucamonga (\$2.76 billion), Chino (\$2.50 billion), Perris (\$2.10 billion) and Victorville (\$2.05 billion). Of the 52 cities, the five largest 2018-2019 percentage gains were in Perris (15.4%), Needles (14.0%), Jurupa Valley (13.5%), Canyon Lake (12.7%) and Adelanto (10.2%).

Per capita sales reveal how well sales taxes can finance city services for each resident. In 2019, the five leaders were unchanged: Ontario (\$44,765), Big Bear Lake (\$43,565), Palm Desert (\$33,993), Loma Linda (\$31,262), Montclair (\$30,537) and Chino (\$29,946). The weakest per capita sales were in Canyon Lake (\$3,344), Twentynine Palms (\$3,870), Wildomar (\$4,744) Highland (\$4,798), Adelanto (\$5,251). [*Inmates not used in per capita calculations*].

Assessed Valuation. Assessed valuation is important since property taxes are also a major municipal revenue source. On July 1, 2020, San Bernardino County's valuation was \$248.0 billion, up 5.7% and 36.4% above its 2008 high (\$181.8 billion). Riverside County's was \$310.6 billion, up 5.9% and 31.1% over its 2008 high (\$236.9 billion). From 2008-2020, the inflation rate was 24.0%, meaning that the purchasing power of property taxes in both counties is at record levels.

For cities, assessed valuation tends to follow industrial and housing development. In 2020, the top five cities and their annual assessed valuation growth rates were: Riverside (\$33.3 billion; 5.7%), Ontario (\$29.5 billion; 7.4%), Rancho Cucamonga (\$28.8 billion; 4.6%), Corona (\$23.0 billion; 5.6%) and Fontana (\$22.4 billion; 6.4%). Though San Bernardino is second in population and has an industrial base, its low home values kept its valuation (\$16.3 billion; 5.6%) at eighth. Each of the 52 cities saw their FY 2020 assessed valuation increase. Annual assessment growth was led by Calimesa (15.3%), Beaumont (14.2%), Needles (11.8%), Perris (10.4%), Desert Hot Springs (9.1%) and Menifee (8.6%).

Assessed value per capita measures the ability of

property taxes to support city services for each resident. Here, five Coachella Valley cities continued to be strong led by Indian Wells (\$1,175,765) and third ranked Rancho Mirage (\$485,398) followed by La Quinta (\$353,293), Palm Desert (\$304,848) and Palm Springs (\$303,789). Two smaller cities did well: Second ranked Big Bear Lake (\$733,351) and eighth ranked Canyon Lake (\$175,419). Several cities near Los Angeles County ranked high: Chino (7th; \$180,578), Rancho Cucamonga (9th; \$166,512), Chino Hills (10th; \$163,854), Eastvale (11th; \$163,292), and Ontario (12th; \$161,225). Three East SB Valley cities remained weak: San Bernardino (40th; \$77,076), Colton (44th; \$73,637) and Highland (45th; \$71,531). Outlying desert cities ranked in the bottom tier: Twentynine Palms (52nd, \$32,650), Coachella (51st, \$44,308), Blythe (50th, \$57,642), Barstow (49th, \$61,393).

Poverty. The levels of poverty in the Inland Empire are recognized by public health officials as the primary threat to the region's wellness. The good news is that these rates have fallen as the area's economy has aggressively expanded. In 2019, the American Community Survey showed that 13.3% of San Bernardino County's population was below the federal poverty level, down from 18.0% in 2010. It was 18.4% for the county's children under 18, down from 24.7% in 2010. In Riverside County, the share of all people was 11.3%, down from 16.3% in 2010. It was 14.0% for the county's children, off from 2010's level of 23.5%.

Data for all cities was only available for 2018. The highest poverty levels (*all; under 18*) were found in Barstow (36.6%; 51.3%) Adelanto (35.4%; 47.3%), Desert Hot Springs (33.5%; 40.7%), Blythe (28.4%; 42.2%), Needles (27.7%; 44.9%) and Twentynine Palms (23.5%; 29.7%). Among cities of over 100,000 people, the difficulty was most prominent in San Bernardino (20.3%; 30.6%) and Victorville (19.5%; 27.3%). The least poverty occurred in Chino Hills (3.6%; 2.9%), Canyon Lake (5.0%; 5.7%), Murrieta (6.3%; 7.7%), Eastvale (6.4%; 6.0%) and Temecula (6.6%; 7.9%).

Home Sales Volumes. CoreLogic affiliate Data-quick provides home deed recordings by zip code using county recorders's data. In 2019, existing home sales were still slow due to lack of available supply. San Bernardino County's 2019 **existing home sales** recordings fell -0.4% to 24,849 units; Riverside County's sales rose 1.2% to 30,630 sales (*Exhibit 2*). The five cities with the largest volumes were: Riverside (650; -15.1%),

San Bernardino (630; -8.3%), Corona (530; -9.7%), Victorville (408; -15.9%) and Fontana (401; -7.8%). There was sales growth in only ten of 52 cities. They were led by Indian Wells (86.7%; 56 sales), Needles (56.3%; 25 sales), Calimesa (50.0%; 33), Twentynine Palms (26.6%; 119) and Rancho Mirage (24.7; 101). The largest declines in growth were in Montclair (-40.4% to 31 sales), Colton (-30.5% to 73), Adelanto (-30.2% to 81), Eastvale (-25.8% to 181) and Ontario (-25.0% to 198).

Riverside County's 2019 **new home sales** rose 11.4% to 5,997; San Bernardino County's sales fell -0.4% to 3,080. The largest city volume was in Menifee (242; 48.5%). It was followed by Ontario (180; 16.1%), Beaumont (135; 31.1%), Murrieta (130; 17.1%) and Riverside (117; 62.5%). Twenty-nine of 52 cities had increased new home sales. Growth rates were led by Rialto (1,500% to 16 sales). Next were Adelanto (500.0% to 12 sales), Colton (233.3% to 10 sales), Calimesa (208.3% to 37 sales), Perris (100.0% to 42 sales) and Fontana (91.2% to 109 sales).

Home Prices. From third quarter 2019-2020, Riverside County's **median existing home price** rose 13.0% to \$452,000; San Bernardino County's rose 10.8% to \$369,500. These homes were affordable to 43% of Riverside County's families and 54% of those in San Bernardino County. The highest existing home prices and their annual changes for third quarter 2020 were led by Indian Wells (\$852,500; 10.3%), Rancho Mirage (\$732,500; 12.0%), Chino Hills (\$704,500; 4.4%), Palm Springs (\$691,272; 10.3%) and Rancho Cucamonga (\$631,319; 9.8%). Outlying desert cities continued to be the most affordable: Needles (\$126,500; 48.8%), Blythe (\$140,000; -13.7%), Twentynine Palms (\$150,000; 7.1%), Barstow (\$155,000; 12.3%) and Yucca Valley (\$247,500; 20.4%). Prices increased in 49 of 52 cities led by Needles (48.8%), Big Bear Lake (29.8%), Loma Linda (24.7%), La Quinta (23.6%) and Yucca Valley (20.4%).

San Bernardino County's **median new home price** from third quarter 2019-2020 rose 6.1% to \$506,000; Riverside County's increased 2.4% to \$445,500. The highest prices were in La Quinta (\$933,000; 12 sales), Indian Wells (\$895,000; 6 sales), Chino Hills (\$854,250; 7 sales), Montclair (\$760,000; 2 sales) and Palm Springs (\$689,031; 16 sales). Priced under \$300,000 were six cities: Blythe (\$75,000, 2 sales), Twentynine Palms (\$120,000, one sale), Needles (\$170,000; 1 sales), Barstow (\$245,500, 2 sales), Hemet (\$286,333; 22 sales)

and Desert Hot Springs (\$299,000; 2 sales). The greatest 2019-2020 price increases were in Needles (150.0% to \$170,000), Norco (56.0% to \$567,000), Montclair (49.0% to \$760,000), Apple Valley (47.7% to \$439,333) and La Quinta (42.9% to \$933,000).

Income. 2019 median household income in Riverside County was \$73,260 and gross county income was \$70.2 billion. Those levels were \$67,903 and \$55.7 billion for San Bernardino County. Incomes for all 52 inland cities were only available for 2018. The highest median incomes were in Eastvale (\$114,230), Indian Wells (\$104,522), Chino Hills (\$103,473), Murrieta (\$100,080) and Canyon Lake (\$97,237). For comparison, Irvine was \$111,574; Santa Monica was \$92,490. The lowest were: Needles (\$31,843), Coachella (\$33,870), Desert Hot Springs (\$34,814), Barstow (\$39,585) and Hemet (\$39,653). Total 2018 personal income was led by Riverside (\$7.81 billion), Rancho Cucamonga (\$6.56 billion), Corona (\$5.45 billion), Fontana (\$5.241 billion) and Ontario (\$4.35 billion).

Jobs/Housing Balance. Often, the fastest growing Inland Empire cities see population surges before job growth, creating commuting issues. Within the region, one city may be the job hub for its neighbors. The ratio of city-based jobs to occupied homes is a measure of this with 1.26 being a balance ratio for Southern California. San Bernardino County is closer to that level (1.21), than faster growing Riverside (1.03). The five highest city ratios meaning heavily job nodes were: Ontario (2.46), Norco (2.29), Loma Linda (2.27), Chino (2.15), Corona (1.80). The five lowest, meaning major commuter locations were: Canyon Lake (0.33), Calimesa (0.35), Eastvale (0.37), Menifee (0.39) and Desert Hot Springs (0.43). Nineteen of the region's 52 cities exceeded the 1.26 balanced ratio.

Most Prosperous? Which Inland Empire cities are the most economically prosperous? Summing city rankings for *per capita* retail sales, *per capita* assessed value and poverty share, as well as rankings for absolute 2010-2019 population growth, median income and median price of all homes, plus jobs:housing balance could yield a perfect score of "7" for seven first places or a worst score of "364" from seven 52nd places. In 2019-2020, the best 10 scores on these criteria were: Chino (58), Temecula (67), Corona (72), Ontario (73), Indian Wells (85), Norco (98), Rancho Cucamonga (101), Murrieta (104), Riverside (1093) and Chino Hills (109). ■

INLAND EMPIRE EMPLOYMENT... Covid's Impact

By December 2020, the Inland Empire is on track to be down -102,300 jobs or -6.56% below its 2019 employment level (*Exhibit 3*). That said, this would be an improvement over the -195,500 job decline at the low point in April 2020. This view assumes that Congress will agree to a stimulus package of some kind now that the November election is over. Looking ahead to 2021 hard hit population serving sectors are assumed to recover: eating & drinking (15.0%), retailing and consumer services (5.0%), travel and entertainment (16.5%) based on their growth from April to September 2020. Those high growth rates are assumed given that these sectors have been artificially restrained by state mandated shutdown due to Covid-19. Other sectors are assumed to grow at the compound annual rates they did

facturing decline was a continuation of consolidation in that sector pushed harder by the Covid recession.

MODERATE LOSING SECTORS: -19,700 Jobs; -19.3% of Loss

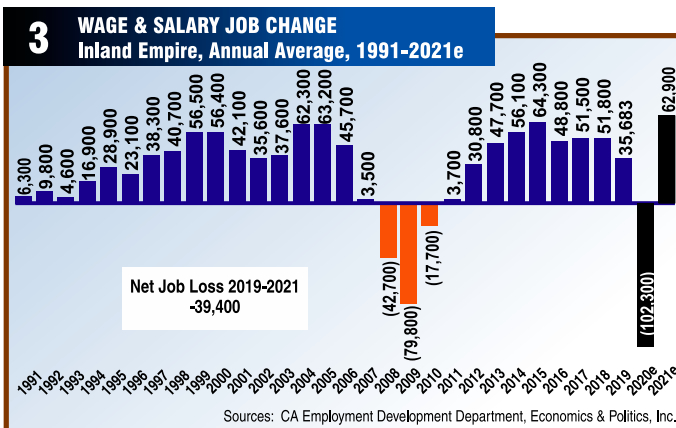
Most of the other sectors in the Inland Empire's economy also will have lost jobs in 2020 compared to 2019. This included three sectors somewhat related to the housing market. Of these, two are moderate paying groups: construction (-4,200; -4.0%) and financial activities (-600 jobs; -1.4%). Also the small and well paying mining sector was down (-100; -8.3%).

Several high paying sectors also lost jobs led by management & professions (-2,900; -5.6%) and higher education (-1,600; -8.3%). Information was down -1,500 (-13.0%). Local government is expected to be down -1,400 (-1.7%). The important health care sector will have lost jobs for the first time in recent memory (-1,000; -0.7%).

Lower paying sectors in decline included administrative support (-4,300; -4.1%), agriculture (-1,200; -7.9%) and social services (-1,000; -1.2%).

GROWING SECTORS: 3,700 Jobs; +3.6% of Loss

Three sectors will likely average a little growth by the end of 2020. Logistics (2,000; 1.0%) will do so because so many people are buying on-line and propelling the inland counties e-commerce sector. It will be dampened by the impact of tariffs and Covid-19 on imports. Federal & state government will grow (1,600; 4.1%) because of the impact of census workers. Finally, utilities will add 100 jobs (2.1%) as they must still serve the region.



in the post-Great Recession period from 2011-2019 except where this appeared to be too fast for current conditions (*i.e., logistics, construction, health care*). The QER predicts 62,900 jobs will be added in 2021. That would still leave -39,400 jobs to be recovered in 2022.

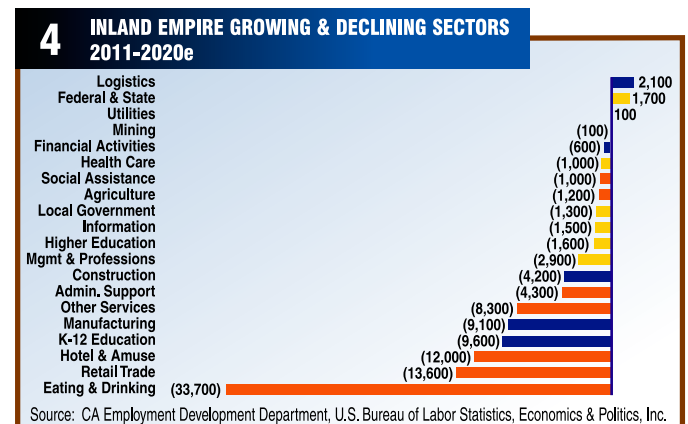
MAJOR LOSING SECTORS: -86,200 Jobs; -84.3% of Loss

Primarily, the Covid-19 shutdown has hurt service sectors where people interact closely together. By December 2020, assuming some growth after September, those losing the most jobs compared to 2019 would be eating and drinking (-33,700; -24.6%) and retailing (-13,600; -7.4%). The largest shares of jobs were lost in hotel and entertainment (-12,000; -31.6%). Also hit hard was the consumer services group (-8,300; -18.1%) which included sectors like automotive repair, hair stylists and personal trainers. Each of these is a relatively low paying sector (*Exhibit 4*).

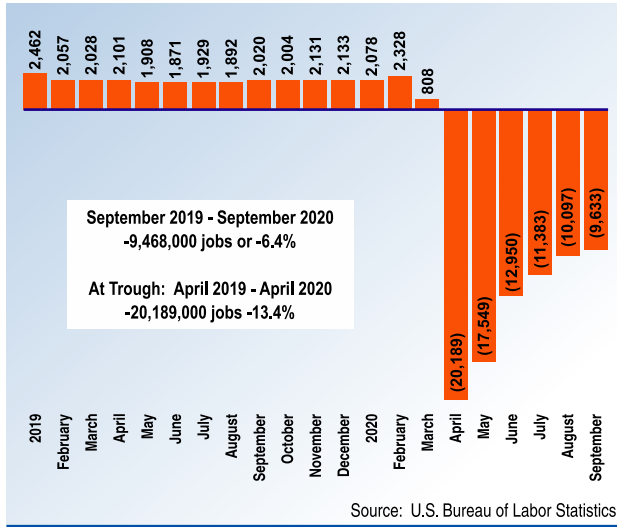
Two other badly hit sectors were K-12 education (-9,600; -6.9%) and manufacturing (-9,100; -8.9%). The education decline was limited to private schools as the K-12 public sector jobs were protected by the state. The manu-

SUMMARY

It is likely that 2020 will go down in history as the worst year economically in the lives of most Americans as well as most inland residents. Even 2021 is unlikely to bring the area back to the job levels seen in 2019. It will take 2023 to accomplish that. ■

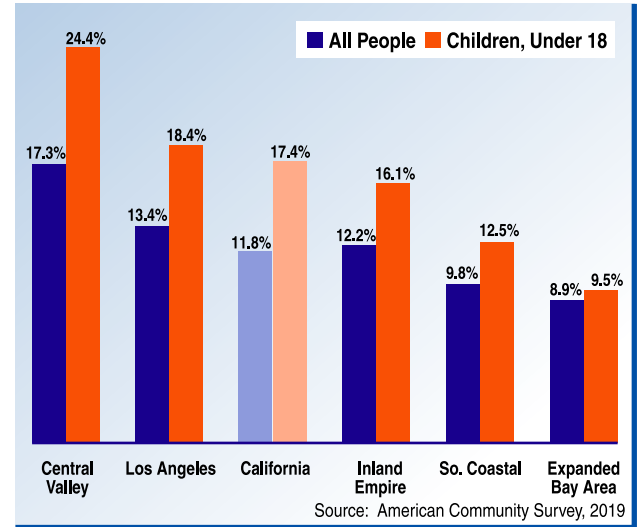


5 JOB CREATION OR DESTRUCTION U.S., 2019-2020, Seasonally Adjusted (000)



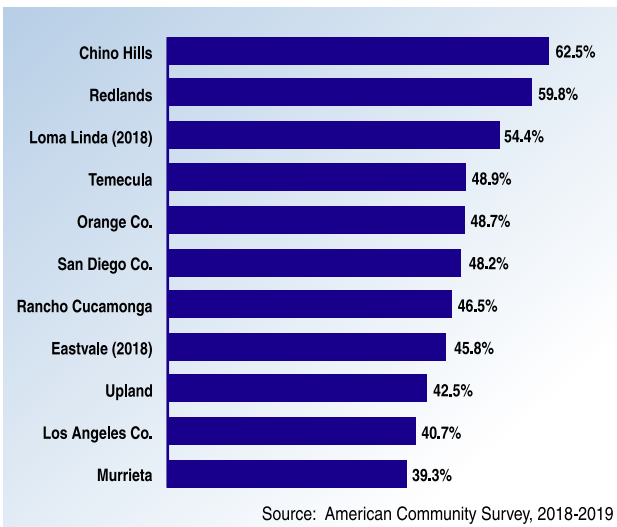
U.S. Covid-19 Impact. Job changes during 2019 showed the U.S. economy growing in every month compared to 2018. These job increases continued into 2020 compared to 2019 with 2,078,000 more year over year jobs in January and 2,328,000 in February. When Covid-19 became an issue, the growth fell to 808,000 in March. April 2020 saw the great shutdown due to the pandemic with -20,189,000 million jobs lost compared to 2019 (-13.4%). Since then the U.S. economy has comeback somewhat with September employment down -9,648,000 (-13.4%) versus that month of 2019. This gradual decrease in the relative job decline has occurred as some sector has partially reopened while others have barely done so. This national environment has been reflected in the partial comeback of the inland economy since April 2020.

6 SHARE OF POPULATION LIVING IN POVERTY California Regions, 2019



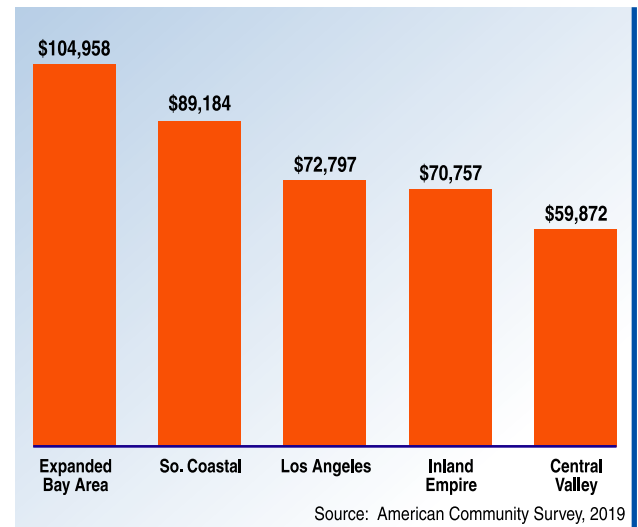
Poverty. A continuing difficulty impacting the Inland Empire has been the share of its population living in poverty. Fortunately, economic forces in the Inland Empire have succeeded in taking many people out of poverty by 2019. As a result, the American Community Survey has found that the level of poverty has dropped significantly. Thus, the share of children under 18 living below the federal poverty line has fallen from 24.1% in 2010 to 16.1% in 2019. Poverty for all people has dropped from 17.1% in 2000 to 12.2%. Poverty levels for the Inland Empire now rank below Los Angeles County and California. While still unacceptably high, poverty levels were definitely moving in the right direction before the Covid-19 setback.

7 HIGHEST SHARE ASSOCIATES OR HIGHER DEGREES Inland Empire Cities, 2019



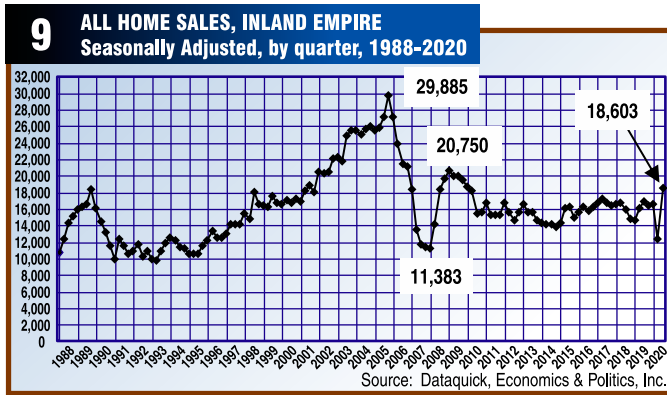
Educational Attainment. A competitive difficulty for the Inland Empire is its modest level of educated adults. In 2019, inland residents with community college (AA) or higher degrees were only 31.2% of adults (*not shown*). This was below the shares in the coastal counties: Los Angeles (40.7%), San Diego (48.2%), Orange (48.7%). However, some inland cities do offer firms strong shares of educated workers. Thus, soaring coastal home prices have forced educated adults with AA or higher degrees to migrate inland for upscale housing. That plus local colleges have given these cities strong levels of AA or higher educated residents: Chino Hills (62.5%), Redlands (59.8%), Loma Linda (48.9%) and Temecula (48.9%) above Orange County. Rancho Cucamonga (46.5%), Eastvale (45.8%) and Upland (42.5%) above Los Angeles County and Murrieta (39.3%) just below it.

8 MEDIAN HOUSEHOLD INCOME California Markets, 2019



Median Pay By Sector. The Inland Empire median incomes had strengthened by 2019 but were still less than most California markets. Its 2019 median incomes for all households was \$70,757 (*half above/half below*). This was higher than incomes in the Central Valley (\$59,872). However it was below other major state regions starting with Los Angeles (\$72,797). The southern coastal counties including San Diego, Orange, Ventura and Santa Barbara were at \$89,184. The expanded Bay Area from San Luis Obispo to Marin across to Sacramento stood at \$104,958. Interestingly, when the lower housing costs in the inland counties are taken into account, the Inland Empire's net median income after housing costs stood above Los Angeles County.

HOME MARKETS: Price Increases Mixed, Volume Recovers



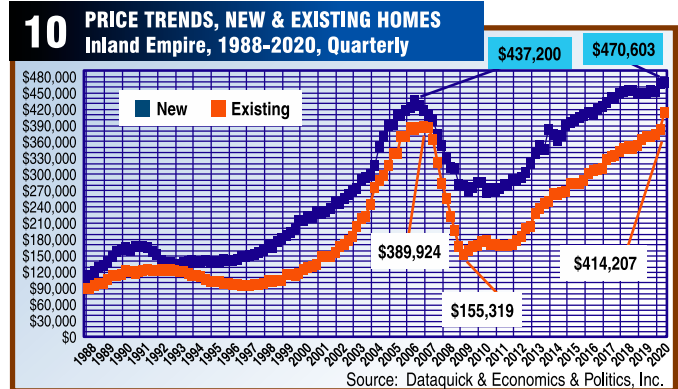
In third quarter 2020, the Inland Empire recorded 18,603 seasonally adjusted existing and new home sales. Volume was the highest since 2009 (*Exhibit 9*). This was a reaction to the decline in 2nd Quarter 2020 when sales dried up due to the Covid-19 shutdown. Meanwhile, the median existing home price in the two county area reached \$414,207, up 11.9% from \$370,036. For the first time, it exceeded the \$389,924 record in 3rd quarter 2006, up 6.8% (*Exhibit 10*). The new home price of \$470,603 was 7.6% above the 2006 record of \$437,208.

Sales. Riverside County had 9,389 existing home sales in third quarter 2020, up 7.3% from 2019. As recordings come at the end of escrow, this included some second quarter sales. Coachella Valley had the highest total and percentage gains (1,722 units; 28.8%). The county's 1,481 new home sales were down -11.1% from 2019. The rural desert area had the fastest growth (104 units, 55.2%). Southwest county had the most volume (431; -14.3%) (*Exhibit 11*).

San Bernardino County's existing home sales rose 13.1% to 7,522 units. The county's mountain area led in volume and sales gains (1,686 sales; 84.7%). New home sales in third quarter 2020 rose 29.0% to 1,051 units. The area around Fontana along the I-10 freeway between the I-15 and I-215 had the fastest growth (100 units; 455.6%). Cities west of the I-15 continued to lead in sales (504 units; 29.9%).

Prices. Riverside County's third quarter 2020 median new home price was \$445,500, up from \$435,000 in 2019 or 2.4%. It was up slightly from \$445,000 in the second quarter 2020 (*Exhibit 12*).

The median existing home price of \$452,000 was 13.0% above 2019's \$400,000 and well above second quarter's \$423,500. San Bernardino County's 2020 median new home price of \$506,000 was up 6.1% from \$477,000 in 2019 and just above second quarter's \$504,00. Its existing median home was \$369,500, up 10.8% from \$333,500 in 2019 well above the prior quarter's \$339,000 median price. Southern California's new home price of \$625,200 was up 3.9% from 2019 (\$602,100). The larger region's 2020 existing home price of \$642,200 was up 12.9% from \$568,900 the prior year.



Summary. In third quarter 2020, volume in the Inland Empire's housing markets was the strongest in the past eight years due to very low interest rates and potential buyers coming out looking for homes. They had been reluctant to engage in the second quarter when the Covid-19 crisis hit. Still, the lack of available homes for sale kept the volume down. High demand but limited supply has propelled prices to levels beyond the prior records in 2006. Still, compared to other markets, affordability remains high in San Bernardino County where 54% of local families could afford median priced existing homes in second quarter 2020 (*half priced above/below*). It was 43% in Riverside County. By contrast, just 25% of Orange County families could afford their county's median priced homes. It was 30% in San Diego County and 32% in Los Angeles County. The lack of affordability in coastal county markets has historically driven buyers inland, but lack of homes for sale has slowed this phenomenon. ■

11 HOME DEED RECORDINGS
Inland Empire, 3rd Quarter, 2019-2020

NEW HOMES				EXISTING HOMES			
Area	3rd-2019	3rd-2020	% Chg.	Area	3rd-2019	3rd-2020	% Chg.
East of I-215	18	100	455.6%	SB Mountains	913	1,686	84.7%
SB Mountains	4	14	250.0%	SB Desert	647	825	27.5%
SB Desert	5	11	120.0%	East of I-215	517	565	9.3%
Victor Valley	130	172	32.3%	Victor Valley	1,348	1,419	5.3%
I-15 to I-215	180	238	32.2%	West of I-15	1,389	1,443	3.9%
West of I-15	388	504	29.9%	San Bdn-Highland	836	743	-11.1%
San Bdn-Highland	90	12	-86.7%	I-15 to I-215	999	841	-15.8%
SAN BDNO COUNTY	815	1,051	29.0%	SAN BDNO COUNTY	6,649	7,522	13.1%
Rural Desert	67	104	55.2%	Coachella Valley	1,337	1,722	28.8%
Corona, Norco	216	266	23.1%	Rural Desert	587	678	15.5%
Coachella Valley	111	128	15.3%	Southwest Co.	2,380	2,622	10.2%
Perris, Hemet, S.Jacinto	242	220	-9.1%	Corona, Norco	924	983	6.4%
Southwest Co.	503	431	-14.3%	Perris, Hemet, S.Jacinto	1,328	1,338	0.8%
Pass Area	247	178	-27.9%	Pass Area	480	481	0.2%
Riverside	169	112	-33.7%	Riverside	1,174	1,109	-5.5%
Moreno Valley	111	42	-62.2%	Moreno Valley	544	456	-16.2%
RIVERSIDE COUNTY	1,666	1,481	-11.1%	RIVERSIDE COUNTY	8,754	9,389	7.3%
INLAND EMPIRE	2,481	2,532	2.1%	INLAND EMPIRE	15,403	16,911	9.8%

Source: Dataquik

12 HOME PRICES
3rd Quarter, 2019-2020

County	3rd Qtr-19	3rd Qtr-20	% Chg.
NEW HOMES			
Riverside	\$435,000	\$445,500	2.4%
San Bernardino	\$477,000	\$506,000	6.1%
Los Angeles	\$670,750	\$720,000	7.3%
Orange	\$935,000	\$952,500	1.9%
San Diego	\$680,500	\$700,000	2.9%
Ventura	\$615,000	\$609,000	-1.0%
So. California	\$602,100	\$625,600	3.9%
EXISTING HOMES			
Riverside	\$400,000	\$452,000	13.0%
San Bernardino	333,500	369,500	10.8%
Los Angeles	655,000	750,000	14.5%
Orange	787,500	875,000	11.1%
San Diego	625,000	710,000	13.6%
Ventura	645,000	720,000	11.6%
So. California	\$568,900	\$642,200	12.9%

Source: Dataquik

Continued from front page

In the Inland Empire, employment in the four sectors hit the hardest by the Covid-19 pandemic have seen very large declines. Travel and amusement jobs appear that they will be down -31.4% fell by the end of 2020 or -12,000 jobs. Eating and drinking outlets will be down -24.6% or -33,700 positions. Consumer services like hair salons and gyms will be off by -18.1% or -8,300 jobs. And, retailers will drop by -7.5% or -13,600 workers.

To forecast these sectors, a hard look was taken at how well they recovered in the four months from the low in April 2020 to September 2020. Those rates were then used as a guide for how much they might be expected to recover in 2021. Travel and amusement jobs recovered by 9.7% in the four month period. Given the great fear of being in close proximity to people in confined locations in that period, plus the fact the period missed all of the Fall-Winter-Spring surge in the Coachella Valley, this rate was almost doubled to 16.5% to forecast 2021. Eating and drinking grew 32.0% in the April to September period as many restaurants and bars were allowed to somewhat reopen. That surge was lowered to 15.0% in forecasting 2021 given the latent fears that will likely continue to impact the sector.

Consumer service employment grew only 4.4% in the earlier four month period as the Governor opened and closed these outlets which put people in very close contact with workers. That was nearly doubled to 8.5% for 2021 assuming that these activities will begin to normalize. Finally, retailers grew by 11.1% from April to September as many stores reopened. That was lowered to 5.0 % as many of these operations will have already resumed full operations by December. However, there will be a loss as some boutique shops have closed.

With these assumptions, the -102,300 annual average job decline anticipated for all of 2020 would be offset by 62,900 jobs recovered in 2021 leaving 39,400 jobs that must be recovered in 2022 to get the economy back to its 2019 level.

Note, to make a forecast like this, some information and a lot of instinct about how the various sectors will likely move in the coming months has been required. How accurate will the forecasts be? That truly remains to be seen.

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