



LIQB: Affordability Proceeding Update



December 10, 2020





Current Status of Proceeding

- Preparing 1st Annual Affordability Report:
 - Will present affordability metrics (bundled and individual industries) based on 2019 data
 - Goal is to highlight regional disparities in affordability metrics and establish baseline to track changes in affordability over time
 - Targeting end of December/early January for release
 - Outputs will also be made publicly available
- Phase 2 work ongoing:
 - Establishing forecasting methodology for forward-looking affordability evaluations
 - Developing implementation procedures for inclusion of metrics in future proceedings
 - Staff proposal and workshop in Q2 2021
 - Proposed decision in Q4 2021





Basic Framework

- **Establishes definition of affordability:** “the degree to which a representative household is able to pay for an essential utility service, given its socioeconomic status”. Three elements are required to distinguish "affordability" from other bill-oriented concepts:
 - "degree...able to pay": Ability to pay relative to resources to pay e.g. relative to income
 - "essential utility service": Essential service only i.e. doesn't include discretionary service
 - "socioeconomic status": Socioeconomic indicator(s)
- **Defines three metrics for affordability:**
 - **Affordability ratio (AR):** the percent of a household’s income that is required to pay for an essential utility service, after non-discretionary costs such as housing and other essential utility services are removed from the household’s income
 - **Hours at minimum wage (HM):** hours of work necessary for a household earning minimum wage to pay for essential utility service charges
 - **Socioeconomic vulnerability index (SEVI):** describes the relative socioeconomic characteristics of communities in terms of poverty, unemployment, educational attainment, linguistic isolation, and percent of income spent on housing





2019 Affordability Results

- Results presented on subsequent slides are preliminary; some inputs to calculations have not yet been finalized
- Results are for bundled affordability (all utility services combined) at the PUMA and census tract levels
- Results will be provided to the public along with report (Tableau maps, spreadsheets with detailed metrics, etc.)

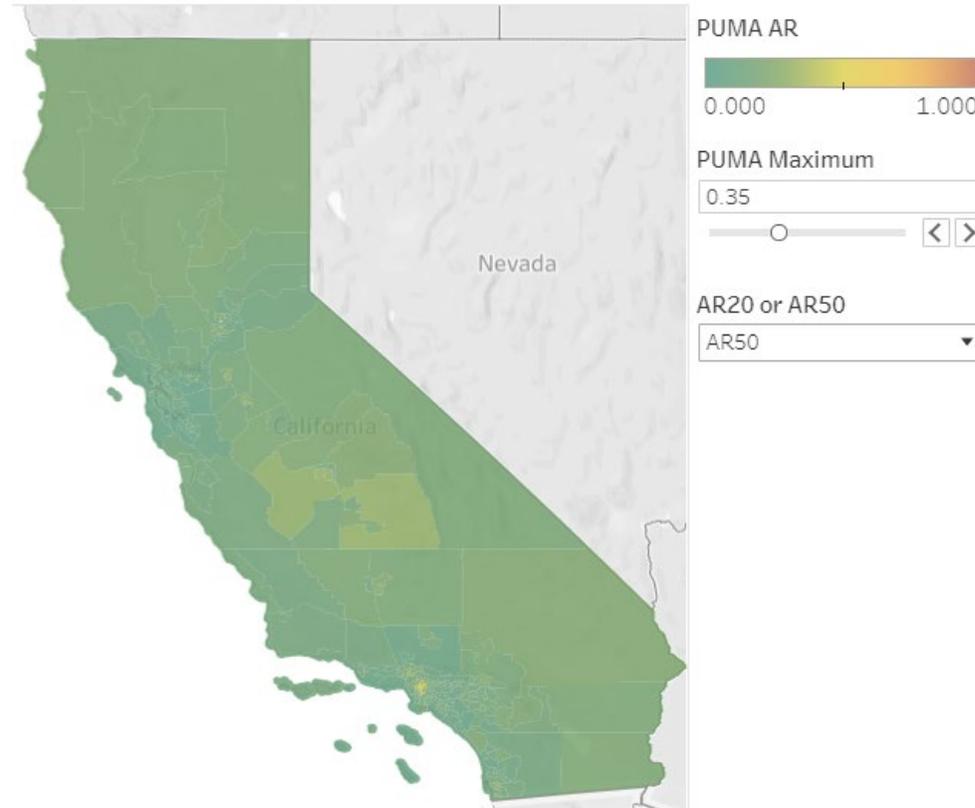
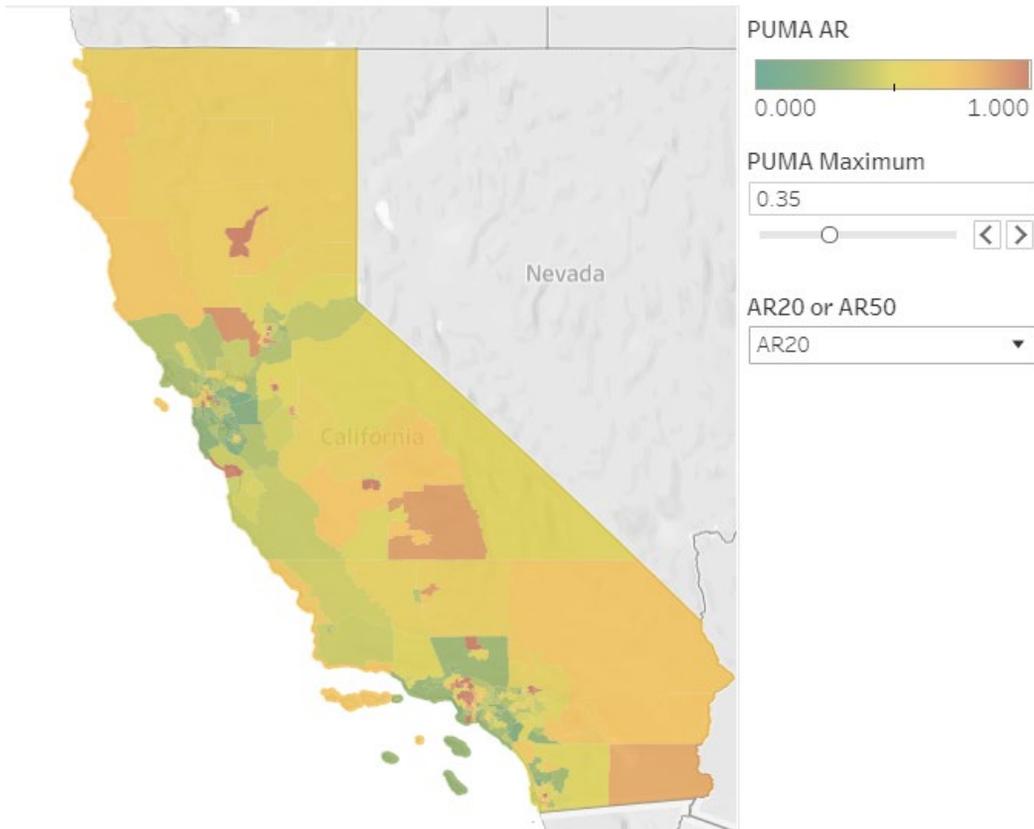




Statewide Bundled AR Results

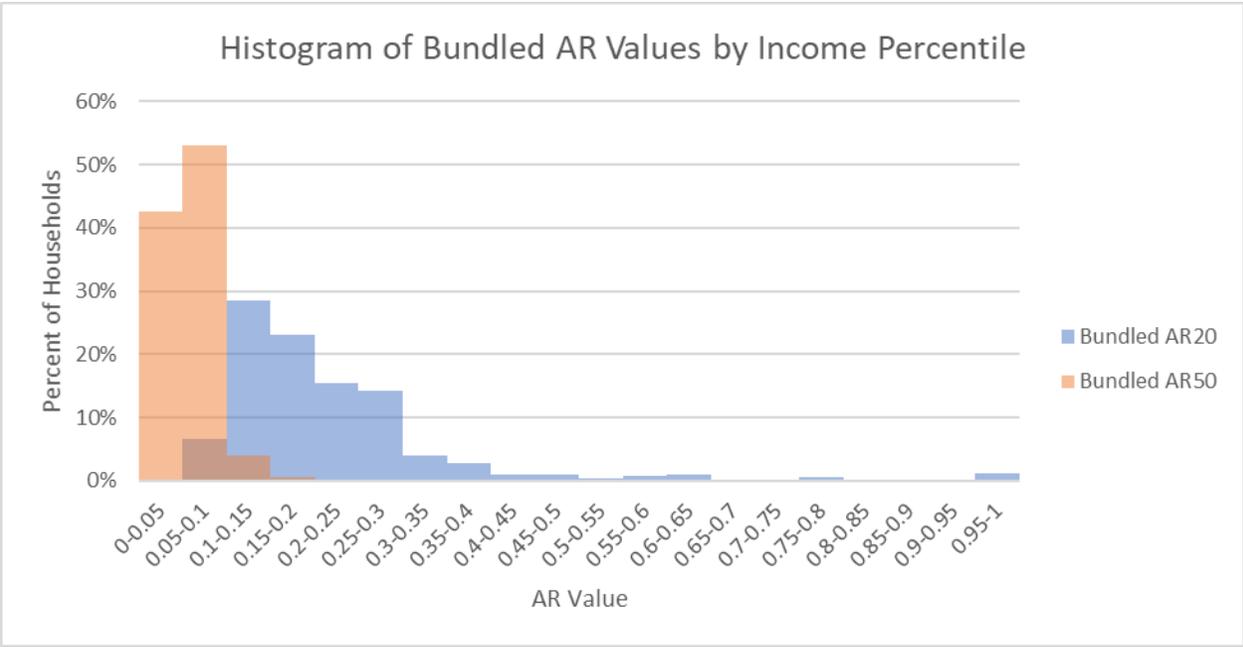
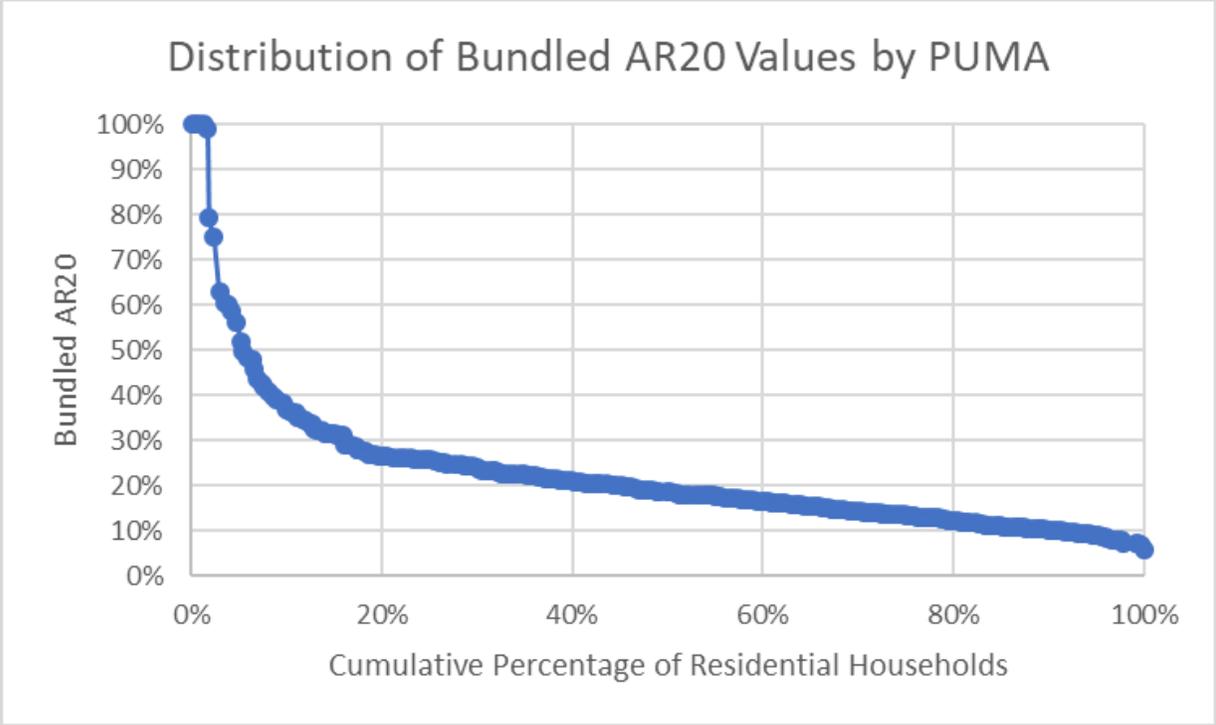
20th Income Percentile AR (AR₂₀)

50th Income Percentile AR (AR₅₀)





Distribution of AR Values





Details of PUMAs with AR₂₀ > 35%

- Statewide average 20th percentile income level based on PUMA-level income distributions: \$32,029/year
- Statewide average estimated housing cost for 20th percentile income households: \$1,233/month

PUMA	County/City	AR20	AR50	20th Percentile Income (\$/yr)	50th Percentile Income (\$/yr)	20th Income Percentile Housing Cost (\$/month)	50th Income Percentile Housing Cost (\$/month)
03746	Los Angeles County--LA City (Central/Univ. of Southern California & Exposition Park)	100.0%	19.7%	\$ 11,746	\$ 33,266	\$ 1,128	\$ 1,209
03751	Los Angeles County (South Central)--LA City (South Central/Watts)	100.0%	16.5%	\$ 14,245	\$ 35,569	\$ 988	\$ 1,112
03750	Los Angeles County (South Central)--LA City (South Central/Westmont)	99.9%	13.5%	\$ 14,223	\$ 40,927	\$ 977	\$ 1,132
03747	Los Angeles County (Central)--LA City (Central/West Adams & Baldwin Hills)	99.9%	13.0%	\$ 15,270	\$ 43,715	\$ 1,021	\$ 1,281
03744	Los Angeles County (Central)--LA City (East Central/Central City & Boyle Heights)	99.1%	14.3%	\$ 12,517	\$ 39,451	\$ 848	\$ 1,203
03745	Los Angeles County (Central)--LA City (Southeast/East Vernon)	79.3%	16.4%	\$ 16,164	\$ 35,465	\$ 958	\$ 1,069
07503	San Francisco County (Central)--South of Market & Potrero	75.0%	6.3%	\$ 17,986	\$ 79,740	\$ 1,090	\$ 1,748
03732	Los Angeles County (Central)--LA City (East Central/Hollywood)	63.0%	11.0%	\$ 18,848	\$ 50,620	\$ 1,083	\$ 1,429
03734	Los Angeles County--LA City (East Central/Silver Lake, Echo Park & Westlake)	60.5%	12.1%	\$ 17,524	\$ 45,896	\$ 951	\$ 1,269
03733	Los Angeles County (Central)--LA City (Central/Koreatown)	60.1%	14.9%	\$ 19,192	\$ 39,639	\$ 1,086	\$ 1,230
03721	Los Angeles County (North)--LA City (Northeast/North Hollywood & Valley Village)	58.8%	10.4%	\$ 20,360	\$ 52,459	\$ 1,174	\$ 1,429
03731	Los Angeles County (Central)--West Hollywood & Beverly Hills Cities	56.3%	6.2%	\$ 26,655	\$ 81,853	\$ 1,692	\$ 2,024
03703	Los Angeles County (North Central)--Lancaster City	51.9%	6.7%	\$ 16,207	\$ 51,724	\$ 939	\$ 1,121
01903	Fresno County (Central)--Fresno City (East Central)	49.3%	10.3%	\$ 14,714	\$ 40,211	\$ 687	\$ 777
03719	Los Angeles County (Central)--Glendale City	48.4%	6.1%	\$ 21,174	\$ 63,545	\$ 1,299	\$ 1,612
07317	San Diego County (South Central)--San Diego City (Central/Mid-City)	48.3%	10.7%	\$ 19,506	\$ 46,335	\$ 1,050	\$ 1,263
03723	Los Angeles County (North)--LA City (North Central/Mission Hills & Panorama City)	45.9%	10.6%	\$ 21,443	\$ 50,068	\$ 1,122	\$ 1,287
07702	San Joaquin County (Central)--Stockton City (South)	43.9%	10.0%	\$ 15,647	\$ 40,927	\$ 720	\$ 842
03722	Los Angeles County (Northwest)--LA City (North Central/Van Nuys & North Sherman Oaks)	42.9%	10.6%	\$ 22,391	\$ 51,697	\$ 1,150	\$ 1,404
03708	Los Angeles County (North)--LA City (Northeast/Sunland, Sun Valley & Tujunga)	42.0%	8.3%	\$ 22,510	\$ 61,080	\$ 1,154	\$ 1,434
01904	Fresno County (Central)--Fresno City (Southwest)	40.4%	10.7%	\$ 15,779	\$ 39,168	\$ 656	\$ 783
03730	Los Angeles County (West Central)--LA City (Central/Hancock Park & Mid-Wilshire)	39.8%	7.7%	\$ 26,939	\$ 70,007	\$ 1,472	\$ 1,841
00104	Alameda County (North Central)--Oakland City (South Central)	38.9%	8.0%	\$ 19,192	\$ 47,878	\$ 1,037	\$ 1,242
03729	Los Angeles County (West Central)--LA City (West Central/Westwood & West Los Angeles)	38.3%	6.5%	\$ 29,929	\$ 79,379	\$ 1,708	\$ 2,008
07108	San Bernardino County (Southwest)--San Bernardino City (West)	36.9%	9.2%	\$ 17,272	\$ 43,102	\$ 766	\$ 881
08702	Santa Cruz County (South & Coastal)--Santa Cruz City	36.4%	6.0%	\$ 25,848	\$ 76,235	\$ 1,392	\$ 1,710
06704	Sacramento County (North Central)--North Highlands, Foothill Farms & McClellan Park	35.9%	8.5%	\$ 17,241	\$ 42,435	\$ 815	\$ 923





Impact of Bill Reduction on Disposable Income

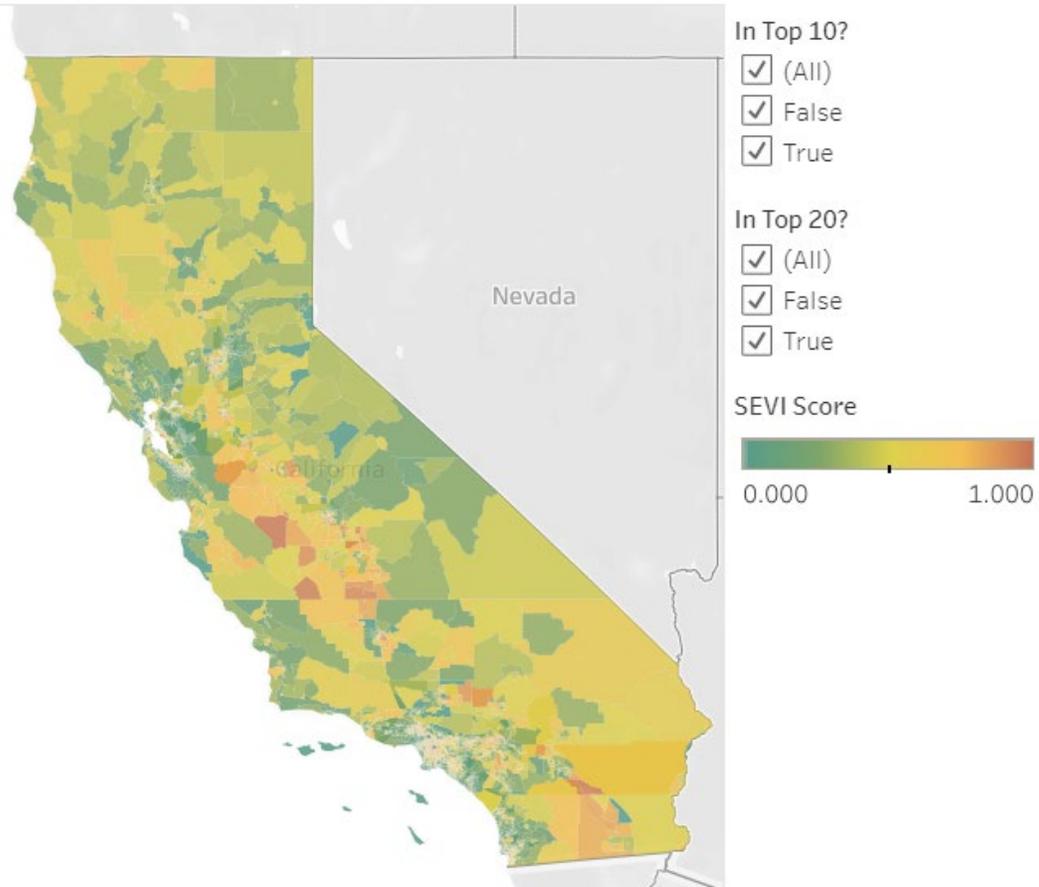
PUMA	County/City	AR20	Disposable Income Change Associated with 1% Reduction in All Bills (%)	Disposable Income Change Associated with 1% Reduction in All Bills (\$/yr)
03746	Los Angeles County--LA City (Central/Univ. of Southern California & Exposition Park)	100.0%	N/A	\$ 36.98
03751	Los Angeles County (South Central)--LA City (South Central/Watts)	100.0%	N/A	\$ 36.76
03750	Los Angeles County (South Central)--LA City (South Central/Westmont)	99.9%	N/A	\$ 36.90
03747	Los Angeles County (Central)--LA City (Central/West Adams & Baldwin Hills)	99.9%	N/A	\$ 36.94
03744	Los Angeles County (Central)--LA City (East Central/Central City & Boyle Heights)	99.1%	N/A	\$ 35.77
03745	Los Angeles County (Central)--LA City (Southeast/East Vernon)	79.3%	3.8%	\$ 37.03
07503	San Francisco County (Central)--South of Market & Potrero	75.0%	3.0%	\$ 36.81
03732	Los Angeles County (Central)--LA City (East Central/Hollywood)	63.0%	1.7%	\$ 36.88
03734	Los Angeles County--LA City (East Central/Silver Lake, Echo Park & Westlake)	60.5%	1.5%	\$ 36.97
03733	Los Angeles County (Central)--LA City (Central/Koreatown)	60.1%	1.5%	\$ 36.98
03721	Los Angeles County (North)--LA City (Northeast/North Hollywood & Valley Village)	58.8%	1.4%	\$ 36.88
03731	Los Angeles County (Central)--West Hollywood & Beverly Hills Cities	56.3%	1.5%	\$ 35.74
03703	Los Angeles County (North Central)--Lancaster City	51.9%	1.1%	\$ 25.68
01903	Fresno County (Central)--Fresno City (East Central)	49.3%	9.4%	\$ 31.89
03719	Los Angeles County (Central)--Glendale City	48.4%	1.0%	\$ 26.99
07317	San Diego County (South Central)--San Diego City (Central/Mid-City)	48.3%	0.9%	\$ 33.36
03723	Los Angeles County (North)--LA City (North Central/Mission Hills & Panorama City)	45.9%	0.8%	\$ 36.64
07702	San Joaquin County (Central)--Stockton City (South)	43.9%	0.8%	\$ 30.72
03722	Los Angeles County (Northwest)--LA City (North Central/Van Nuys & North Sherman Oaks)	42.9%	0.8%	\$ 36.83
03708	Los Angeles County (North)--LA City (Northeast/Sunland, Sun Valley & Tujunga)	42.0%	0.7%	\$ 36.38
01904	Fresno County (Central)--Fresno City (Southwest)	40.4%	0.7%	\$ 31.94
03730	Los Angeles County (West Central)--LA City (Central/Hancock Park & Mid-Wilshire)	39.8%	0.7%	\$ 36.92
00104	Alameda County (North Central)--Oakland City (South Central)	38.9%	0.6%	\$ 26.27
03729	Los Angeles County (West Central)--LA City (West Central/Westwood & West Los Angeles)	38.3%	0.6%	\$ 36.13
07108	San Bernardino County (Southwest)--San Bernardino City (West)	36.9%	0.6%	\$ 29.84
08702	Santa Cruz County (South & Coastal)--Santa Cruz City	36.4%	0.6%	\$ 33.29
06704	Sacramento County (North Central)--North Highlands, Foothill Farms & McClellan Park	35.9%	0.6%	\$ 26.81



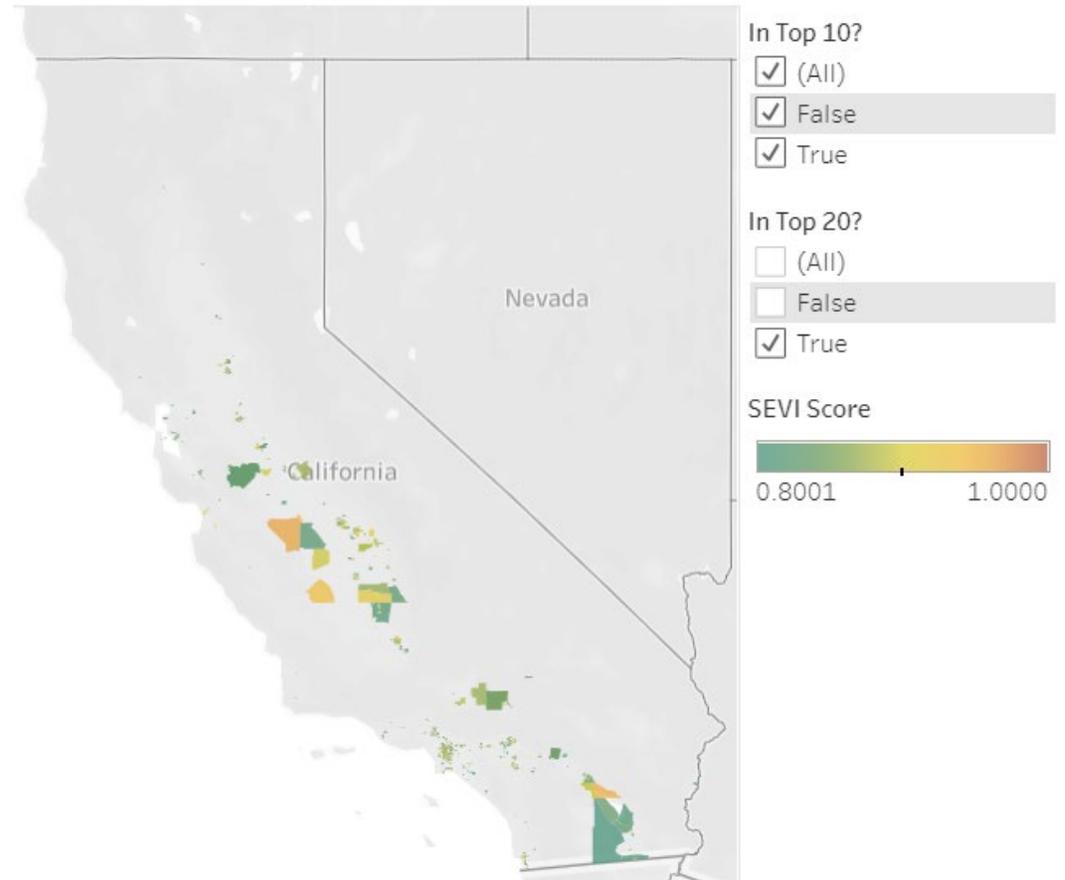


SEVI Results

All Census Tracts

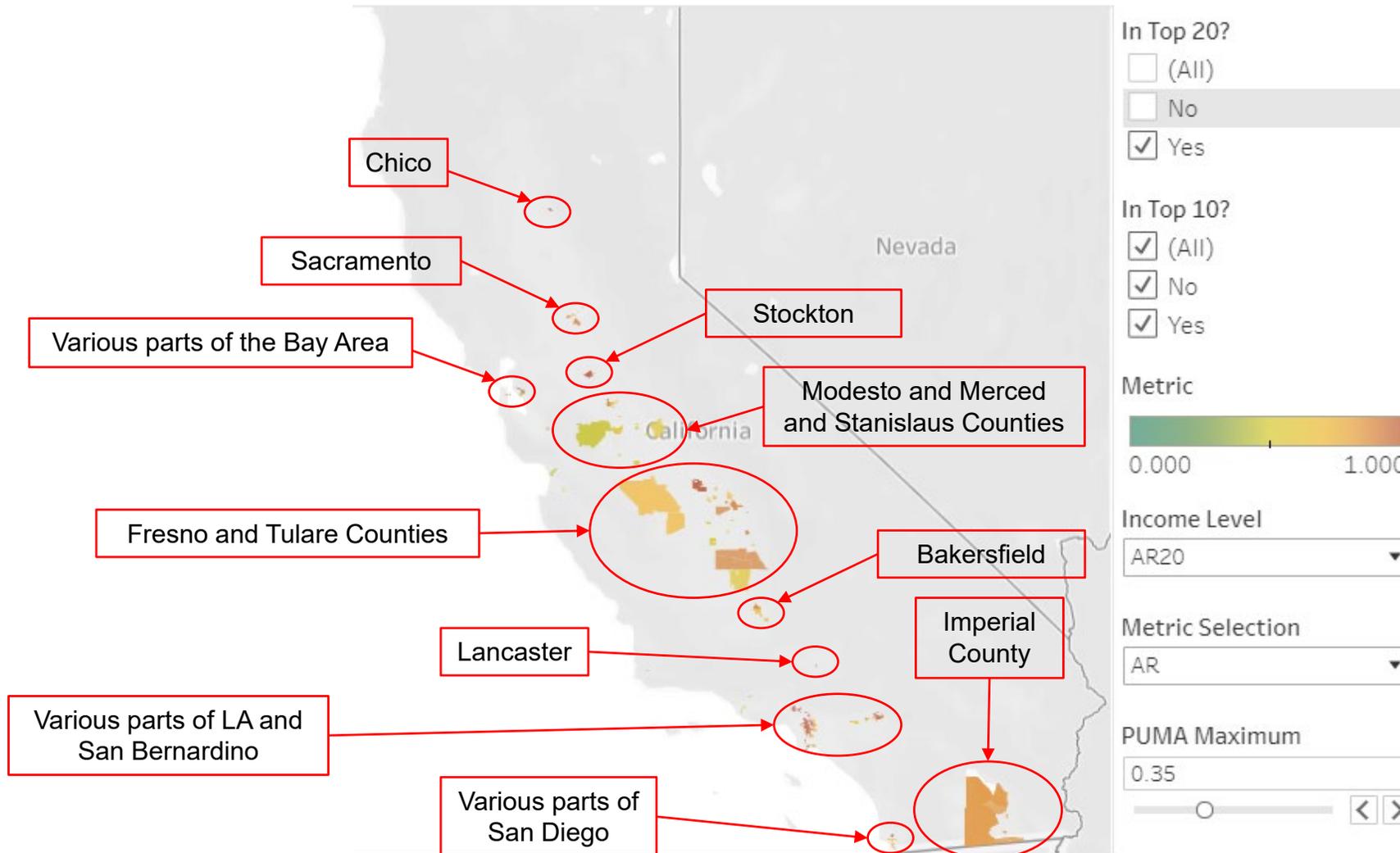


Census Tracts with Top 20% of SEVI Values





Census Tracts with Top 20% AR and SEVI Values





Contact Info and Additional Resources

Ankit Jain – Energy Division, Retail Rates Group

Ankit.Jain@cpuc.ca.gov

For more details on Affordability OIR:

- [Revised Staff Proposal](#) – info on metrics and methodology
- [Phase I Decision](#)
- [Amended Scoping Memo](#) – Phase II scope and schedule
- Annual Affordability Report and publicly available Tableau map with results will be issued end of 2020/early 2021





Backup





Affordability Ratio (AR)

$$\text{Combined Bundle: } AR_{i,total} = \frac{W+E+G+C}{i-H}$$

Essential utility service charges (water, electric, gas, and communications)

Household income minus housing cost

$$\text{Electric: } AR_{i,E} = \frac{E}{i-(H+W+G+C)}$$

$$\text{Gas: } AR_{i,G} = \frac{G}{i-(H+W+E+C)}$$

$$\text{Communications: } AR_{i,C} = \frac{C}{i-(H+W+E+G)}$$

$$\text{Water: } AR_{i,W} = \frac{W}{i-(H+E+G+C)}$$

- **What percent of a household's disposable income (after accounting for nondiscretionary costs such as housing and other utilities) goes towards the essential service bill?**
 - Complex, but captures most relevant elements of representative household's budget
 - Can be extremely geographically specific, or presented as an average value for a large area
- Industry-specific AR allows for analysis of individual utility services while still accounting for other known nondiscretionary costs
- Staff decided to exclude other nondiscretionary expenses (food, medical, education, clothing, etc.) because of how variable they are and lack of data to estimate them
- Focus is on calculation of AR for households at the 20th percentile of the income distribution for each Public Use Microdata Area (PUMA)

