



LIQB: Affordability Proceeding Update



September 17, 2020





Affordability Proceeding Overview

- **Goals:**
 - Develop a framework and principles to identify and define affordability criteria for all utility services under CPUC jurisdiction; and
 - Develop the methodologies, data sources, and processes necessary to comprehensively assess the impacts on affordability of individual CPUC proceedings and utility rate requests.
- **Scope:**
 - Identification and definition of affordability criteria for CPUC - jurisdictional utility services.
 - Methods and processes for assessing affordability impacts across Commission proceedings and utility services.
 - Other issues relating to the CPUC's consideration of the affordability of utility services.
- **Phase 1 focused on developing metrics, Phase 2 will be focused on refining and implementing metrics**





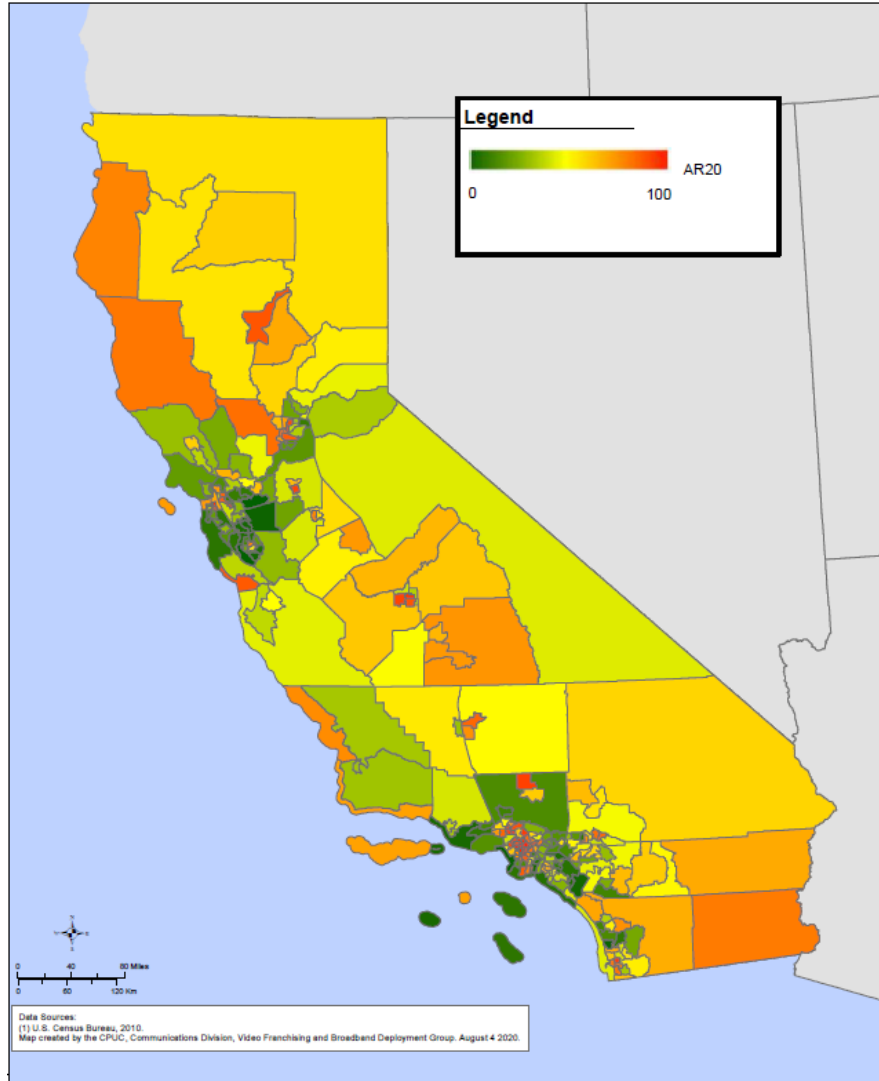
Basic Framework

- **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
- **Implementation – Phase 2**
 - Metrics will be applied in as widespread a manner as possible, to provide staff with a knowledge base to work out remaining issues in Phase 2
 - Annual affordability report
 - Does not establish a specific threshold for affordability in this phase





Example AR Output – Combined Bundle



Can present average values for metrics at several spatial scales:

- Utility service territory
- Climate zone
- PUMA
- Census tract
- Census block group





Phase 2 Work Plan

- Phase 1 decision adopted – 7/16/2020
- Initial Annual Affordability Report – Q4 2020
- Informal Workshop on Forecasting, Proxy Bills, and Other Refinements – January 2021
- Staff Proposal on Implementation Issues (tentative) – April 2021
- Workshop on Staff Proposal (tentative) – April 2021
- Phase 2 Proposed Decision – Q4 2021





Backup





Socioeconomic Vulnerability Index (SEVI)

- **What is the relative socioeconomic standing of a *community*?**
- Composite of 5 indicators collected by CalEnviroScreen
 - Educational attainment
 - Housing Burden
 - Linguistic Isolation
 - Poverty
 - Unemployment
- Census tract scale
- Averaged and normalized to 0-100





Hours at Minimum Wage (HM)

- **How long does a *household* need to work to afford utilities?**
 - Straightforward, intuitive
 - Sensitive to municipal policy variations
- Calculated independently for each combination of essential service charge and minimum wage
- **Water:** $HM_W = \frac{W}{M}$
- **Electric:** $HM_E = \frac{E}{M}$
- **Gas:** $HM_G = \frac{G}{M}$
- **Communications:** $HM_C = \frac{C}{M}$
- **Combined Bundle:** $HM_{total} = \frac{W+E+G+C}{M}$





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)

