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Abstract: This paper was developed as part of a pilot research program called CAL-THRIVES (California Toolkit for Heat Resiliency in Vulnerable Environment). The program was developed because of an urgent need to boost resiliency to heat waves in the built environment, especially for California's most vulnerable populations, such as low-income seniors in disadvantaged communities (DACs). This interdisciplinary research will help disadvantaged communities withstand increasingly extreme heat brought on by climate change, while concurrently reducing greenhouse gas emissions from air conditioning energy use. The research team collected qualitative data via home interviews, focus groups, intercepts, and observations in Fresno, CA. The team focused on both single-family and multi-family residences. Data was collected to understand residents' needs, preferences, behaviors, priorities, concerns, and barriers to proposed building cooling strategies and coping mechanisms to extreme heat events. The goal of this task is to engage with DACs to characterize their homes and households; identify relevant patterns of behavior, cultural, and social influences around undertaking residential cooling measures; and assess occupant preferences about building safety, comfort, and functionality (e.g., desire for ancillary benefits, such as noise reduction that may accompany envelope improvements). The focus groups and in-depth interviews focused on: (a) assessing attitudes toward heat waves, passive cooling strategies, cooling equipment options, and use of community cooling centers; (b) evaluating the application of the zero-energy, failsafe, passive retrofit measures as well as active cooling measures identified by the research team to cool homes; and (c) exploring the economic impacts of active cooling measures as experienced by participants, such as electricity rates, rebates, and other related-programs. This paper reports on the interest in various measures according to household type (general population, seniors, and primarily Spanish speaking) and ownership status (renters vs. owners).